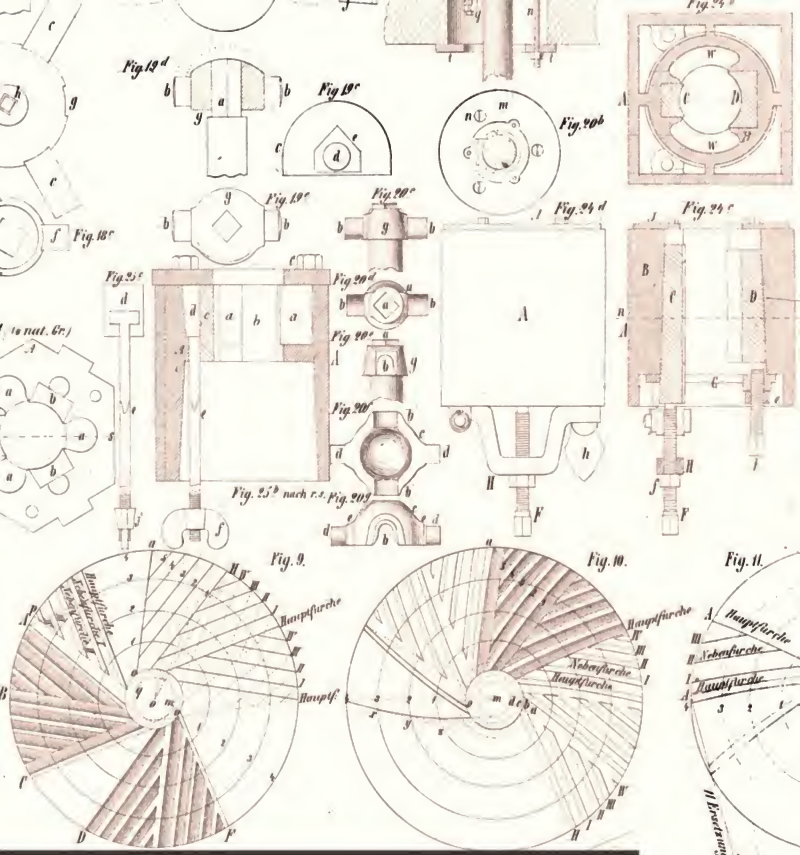

Die Mahlmühlen, ein Darstellung des Baues und des ...

Friedrich-Karl Wiebe

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XXX Tafeln

zu den

Mahlmühlen,

eine Darstellung des Baues und des Betriebes

der

gebräuchlichsten Mühlen,

nach den neuesten Konstruktionen und Erfahrungen,

von

Friedrich Karl Hermann Wiebe,

Professor und ordentlichem Lehrer der Maschinenkunde am Königlichen Gewerbe-Institut und an der Königlichen Bau-Akademie zu Berlin, Ingenieur und Mühlenbaumeister ꝛc.

Stuttgart.

Verlagsbuchhandlung von Carl Mäcken.

1861.

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Ausgeführt in der Buchdruckerei, Anstalt für Lithographie, Farbendruck und Zinkographie von J. G. Mäcken Sohn in Reutlingen.

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Verzeichniß der Tafeln.

I. Konservirung des Getreides.

II. Trocknen und Waschen des Getreides.

III. Reinigungs-Maschinen.

IV. Desgleichen.

V. Schärfe der Mühlsteine; Hauen und Buchsen.

VI. Mahlgänge mit Räderbetrieb.

VII. Mahlgänge mit Räderbetrieb und eisernes Mühlengerüst für 5 Mahlgänge.

VIII. Mahlgang mit Friktionskuppelung und mit Räderbetrieb. — Mühlengerüst für 6 Mahlgänge aus Holz und Eisen.

IX. Mahlgang mit Räderbetrieb und mit Ventilation. — Eisernes Mühlengerüst für 6 Mahlgänge.

X. Mühlengerüst für 6 Mahlgänge mit Räderbetrieb.

XI. Mühlengerüste für stehendes Vorgelege und für Riemenbetrieb.

XII. Mahlgang mit Riemenbetrieb (Konstruktion des Verfassers).

XIII. Mühlengerüst für 10 Mahlgänge mit Riemenbetrieb.

XIV. Desgleichen, Details.

XV. Kreisförmige und rechteckige Gerüste für Mahlgänge mit Riemenbetrieb.

XVI. Vier Mahlgänge mit Riemenbetrieb (Konstruktion des Verfassers).

XVII. Mahlgänge mit Riemenbetrieb und mit Ventilation. — Mahlgang mit drehbarem Bodenstein und Läufer.

XVIII. Mahlgänge mit beweglichem Bodenstein.

XIX. Mahlgang von Fairbairn. — Betrieb der Mahlgänge von oben.

XX. Sackwinden für Mühlen.

XXI. Cylinder-Beutelmaschine.

XXII. Wassermahlmühle mit 12 Gängen von F. Wulff (Rothermühle in Bromberg).

XXIII. Desgleichen.

XXIV. Wassermahlmühle mit 16 Gängen von Dannenberg (Königliche Mühlen in Berlin).

XXV. Desgleichen.

XXVI. Dampfmahlmühle mit 4 Gängen von H. Wiebe (Dampfmühle in Lübeck).

XXVII. Desgleichen.

XXVIII. Dampfmahlmühle mit 12 Gängen von H. Wiebe.

XXIX. Desgleichen.

XXX. Graupenmühlen.

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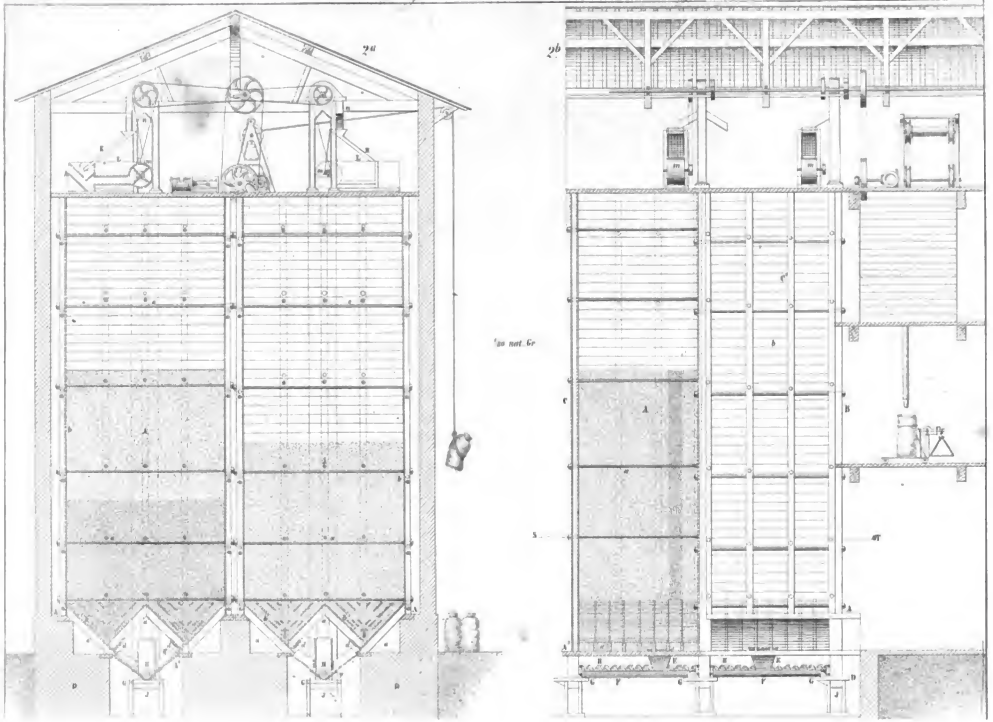

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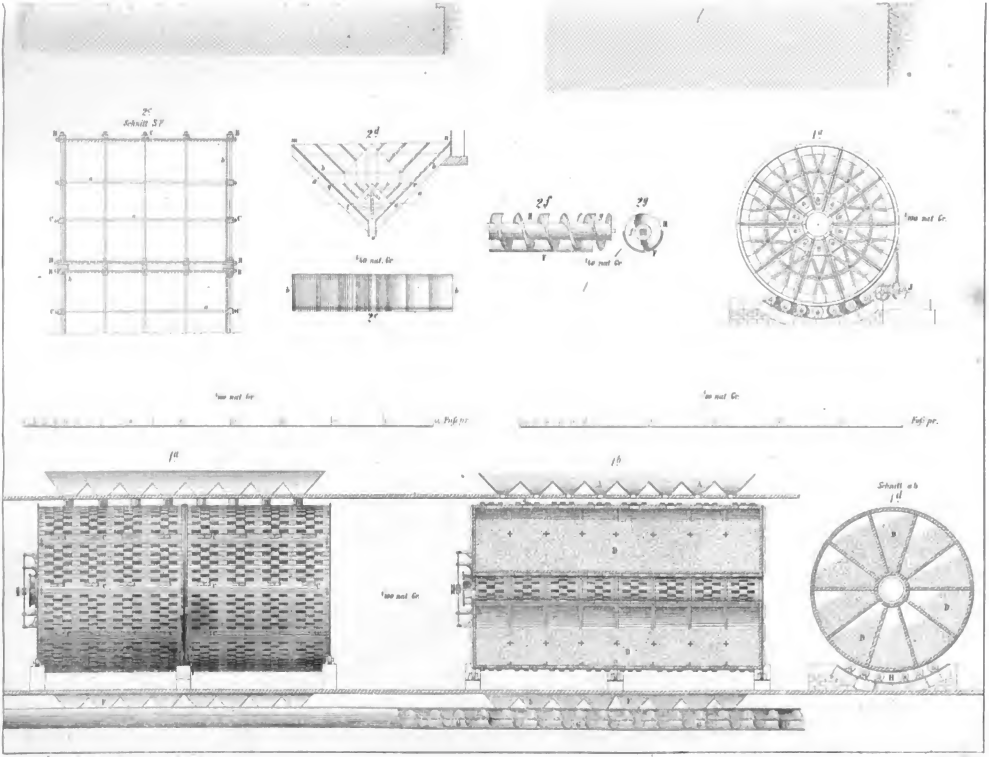

Tafel III

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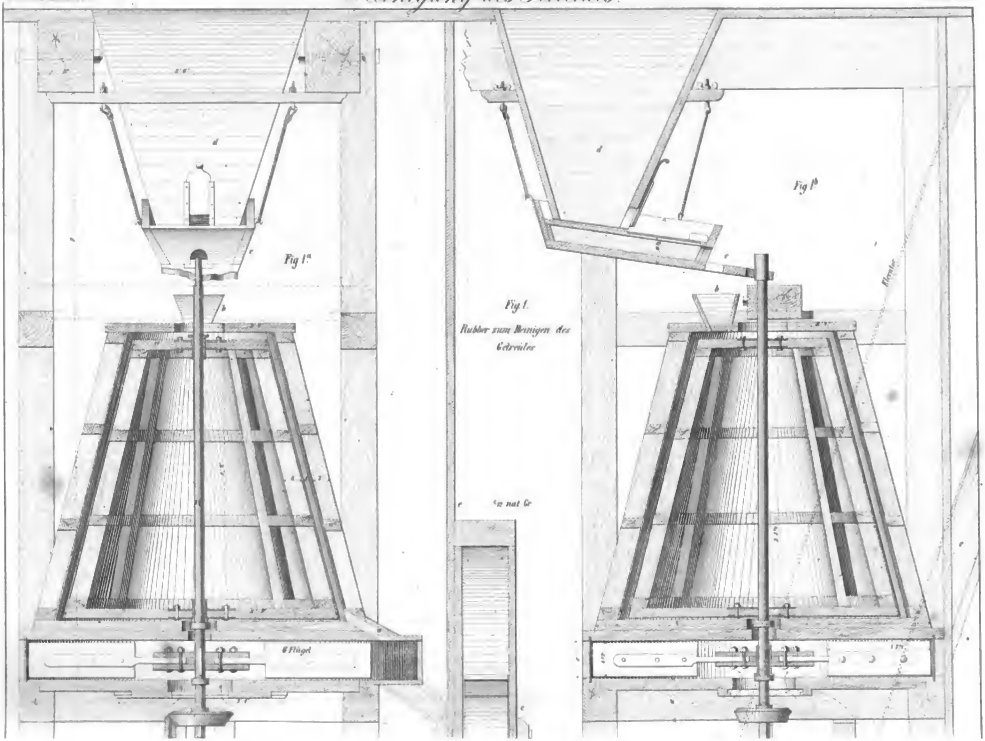

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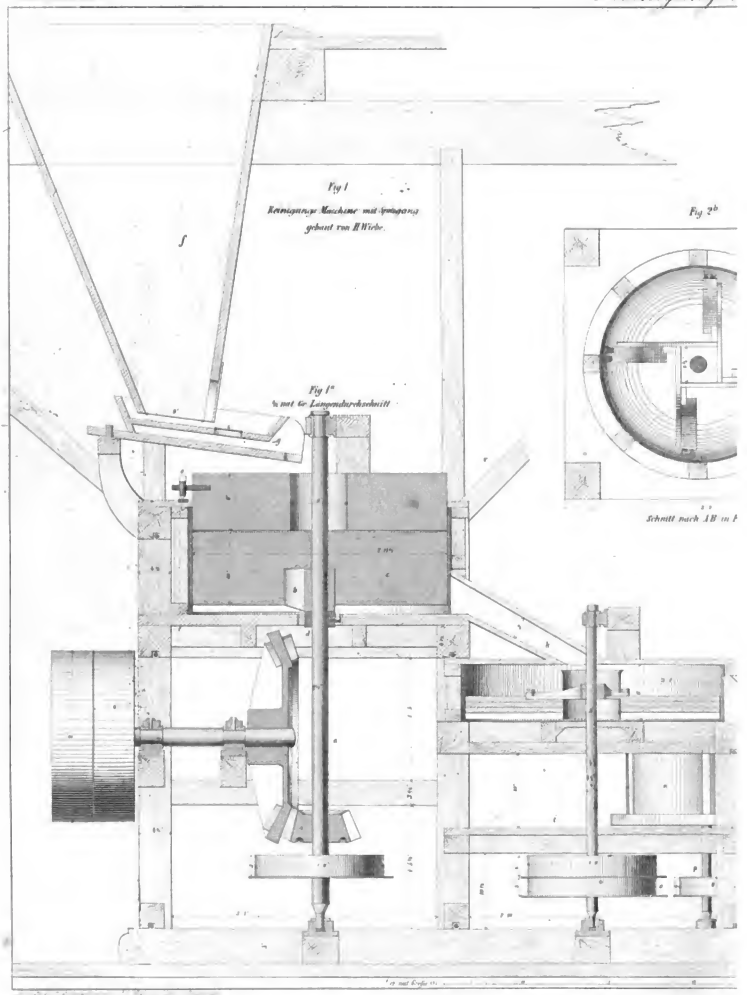
Fig 1.
Einfache Hemmung.
Fig 2.
Maschine gehemmt von 3 Welle.
Fig 3.
Durchschnitt nach AB.
Fig 4.
Ansicht der Rosette
Fig 5.
Ansicht der Welle
Fig 6.
Durchschnitt nach CD



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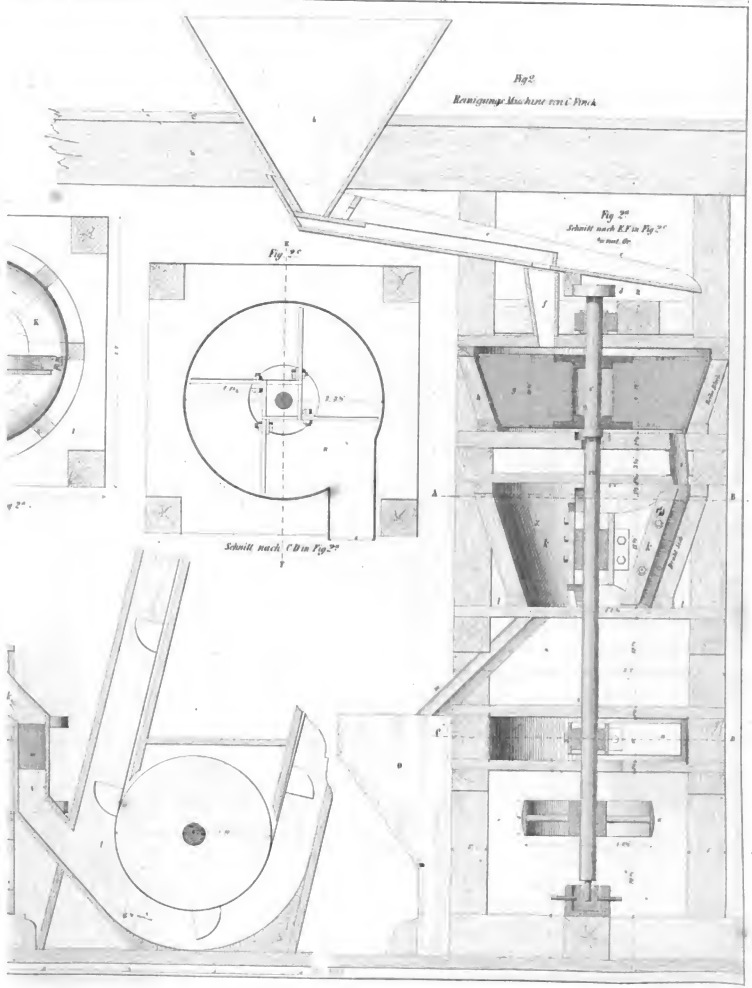

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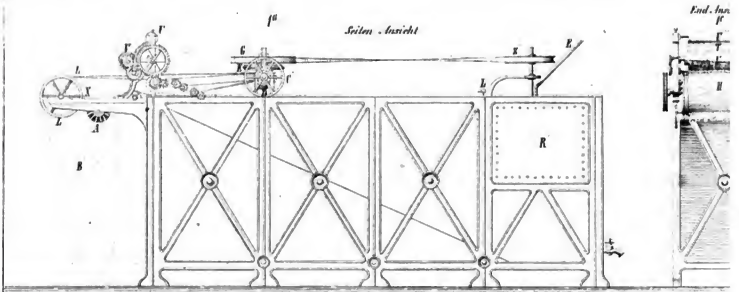

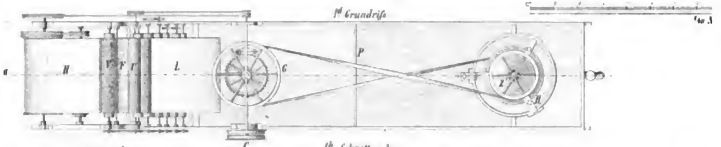

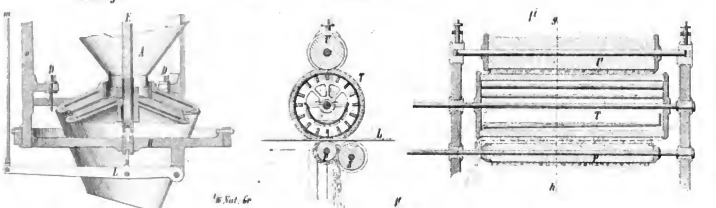

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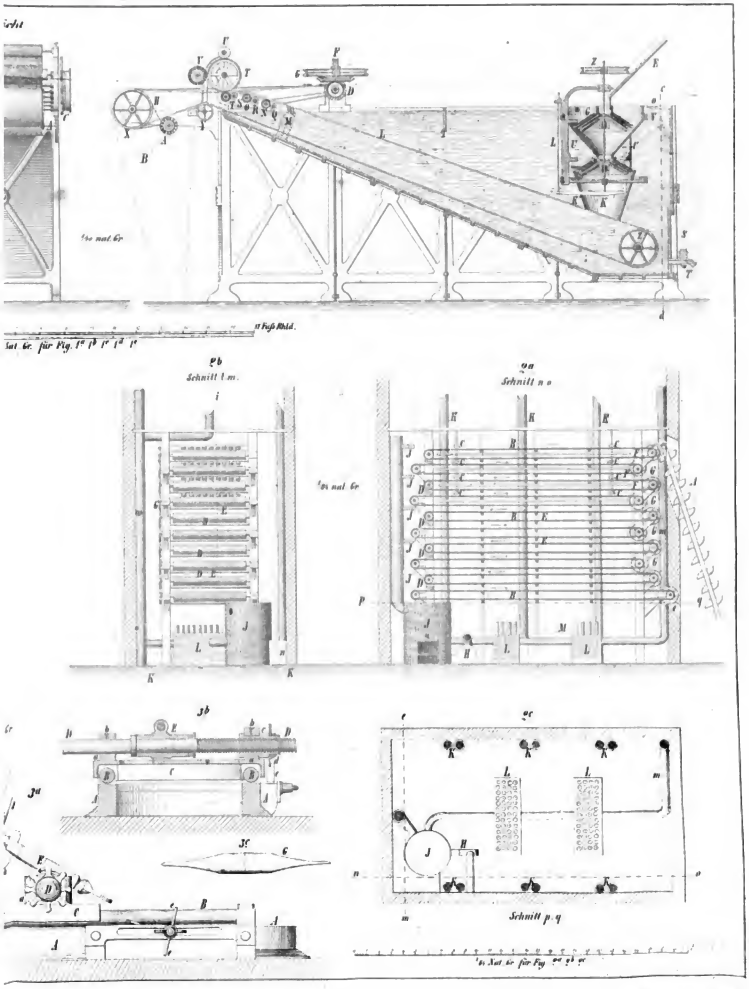

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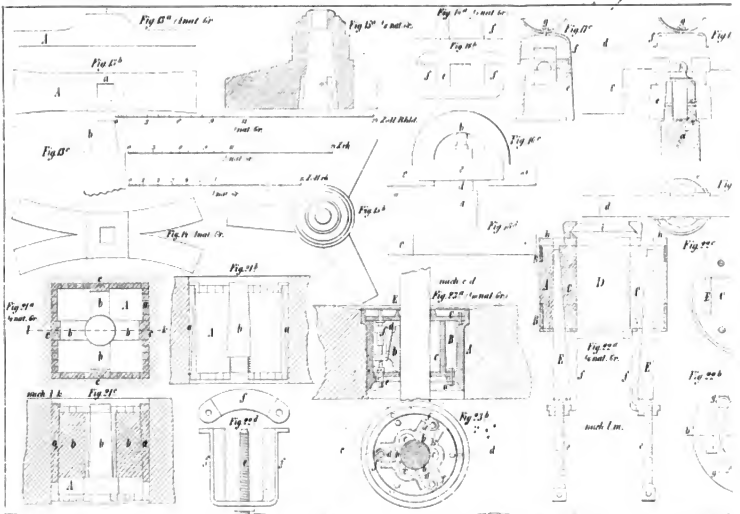
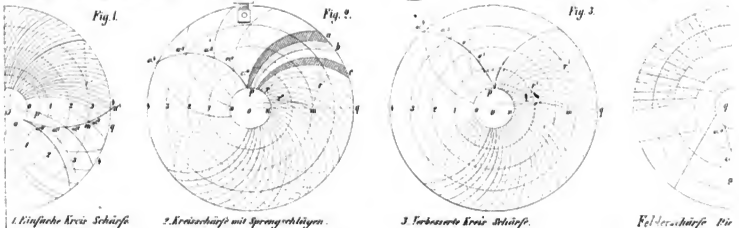
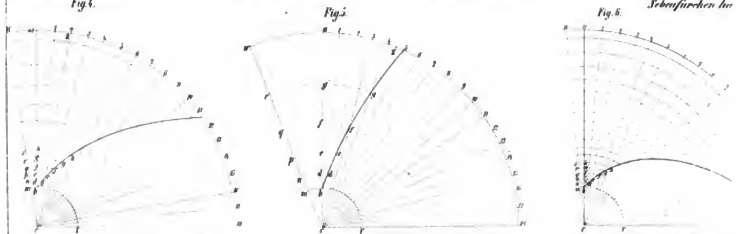




1. Einfache Kreis Schärfe. 2. Kreisschärfe mit Sprengverlägen. 3. Verbesserte Kreis Schärfe. Felderschärfe Die Vebenfurchen ha



4. Construction d. logarithmischen Spirale welche m. d. Radl 20 Gr. macht n. Neumann.

5. Construction d. logarithmischen Spirale welche m. d. Radl. 16 Grad macht n. Neumann.

6. Construction d. logarithmis welche m. d. Radl. 35 Gr. mach

1 bis 4. Grau schärfen 10 bis 16 Steinhauen 20 bis 25 Steinbeschen

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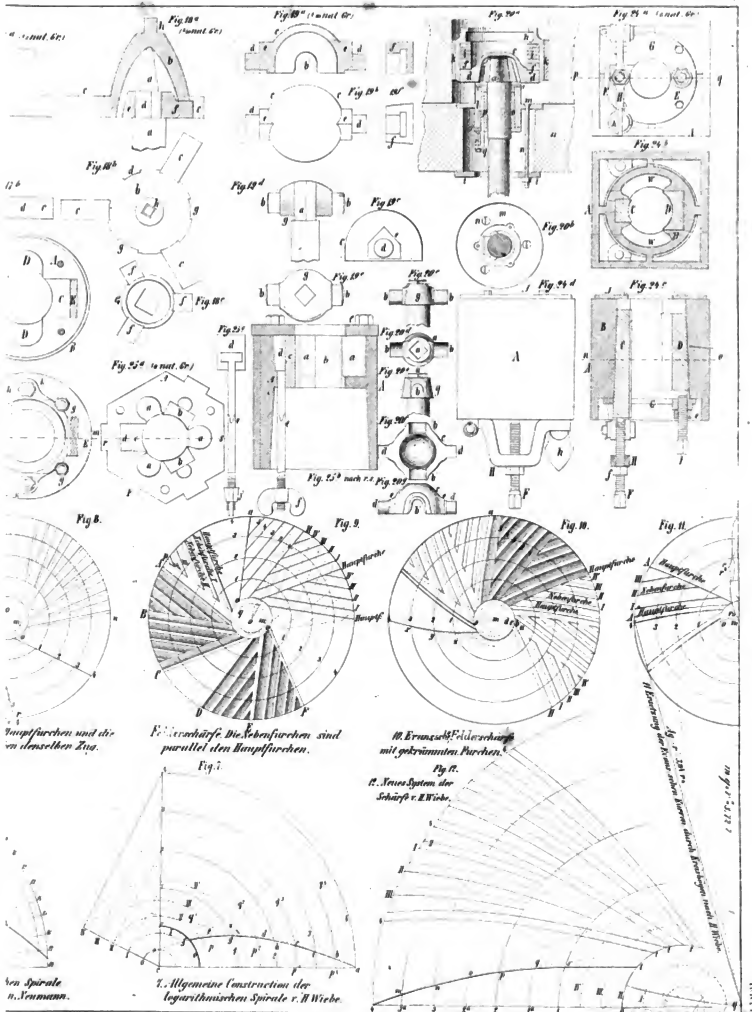


…Hauptfurchen und die …en denselben Zug.

Fe…erschärfe. Die Nebenfurchen sind parallel den Hauptfurchen.

10. Evans sch. Felderschärfe mit gekrümmten Furchen.

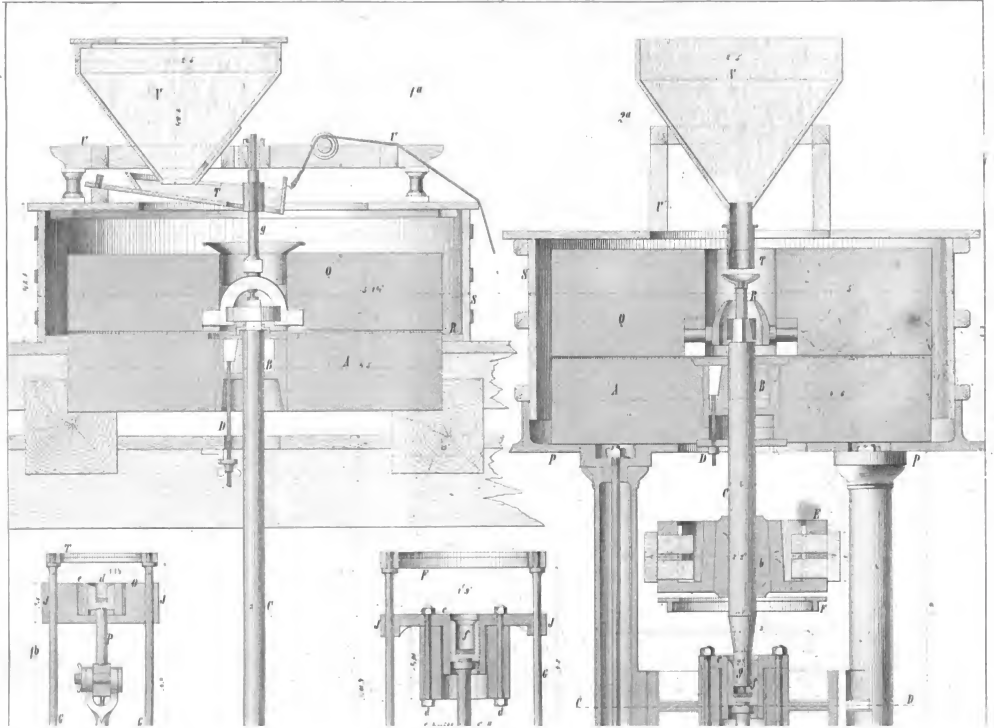
11. Ersatzung der Evans schen Furren durch Kreisbogen nach H. Wiebe.

Fig. 12. Neues System der Schärfe v. H. Wiebe.

…hen Spirale …n. Neumann.

7. Allgemeine Construction der logarithmischen Spirale v. H. Wiebe.

Tafel V.



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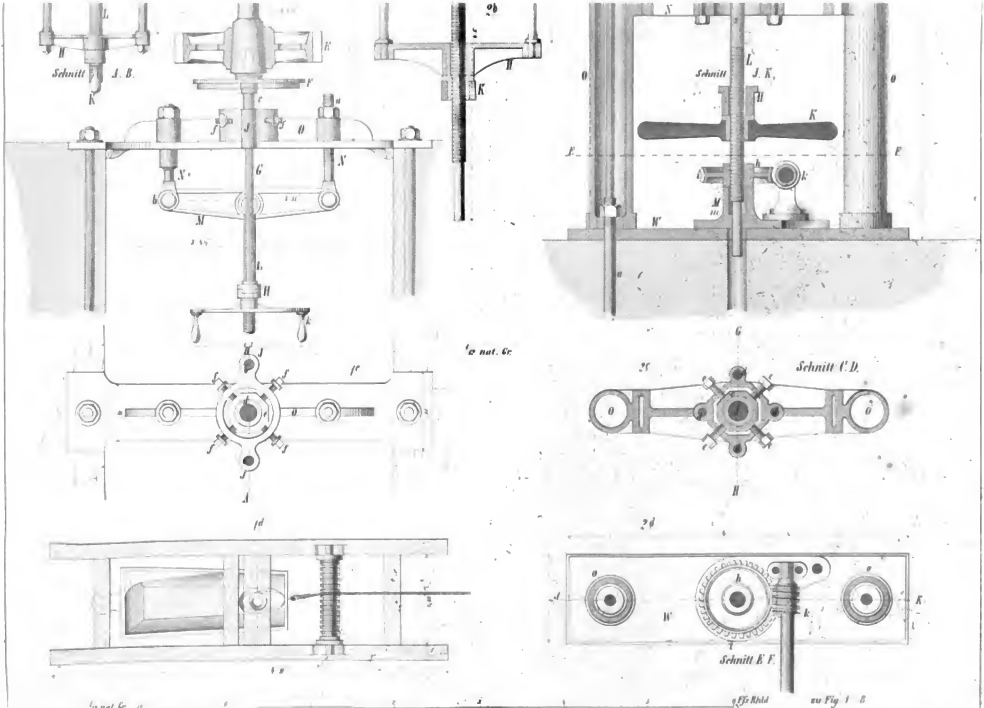

1 Mahlgang von Aitkin und Steel, 2 Mahlgang aus der Adlermühle in Berlin.

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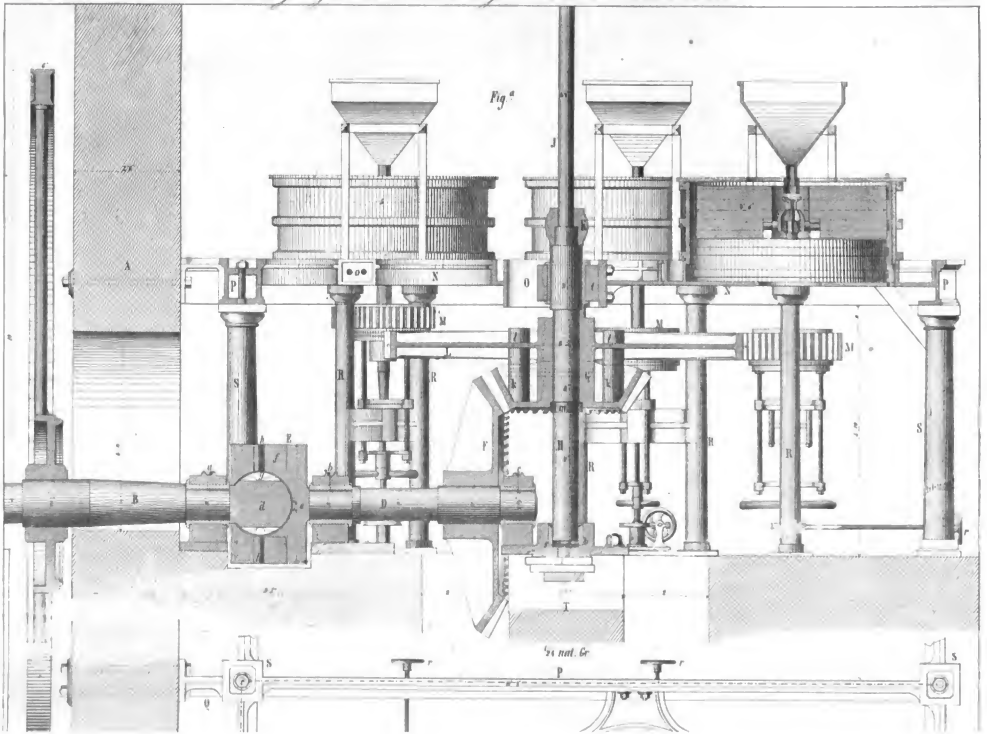

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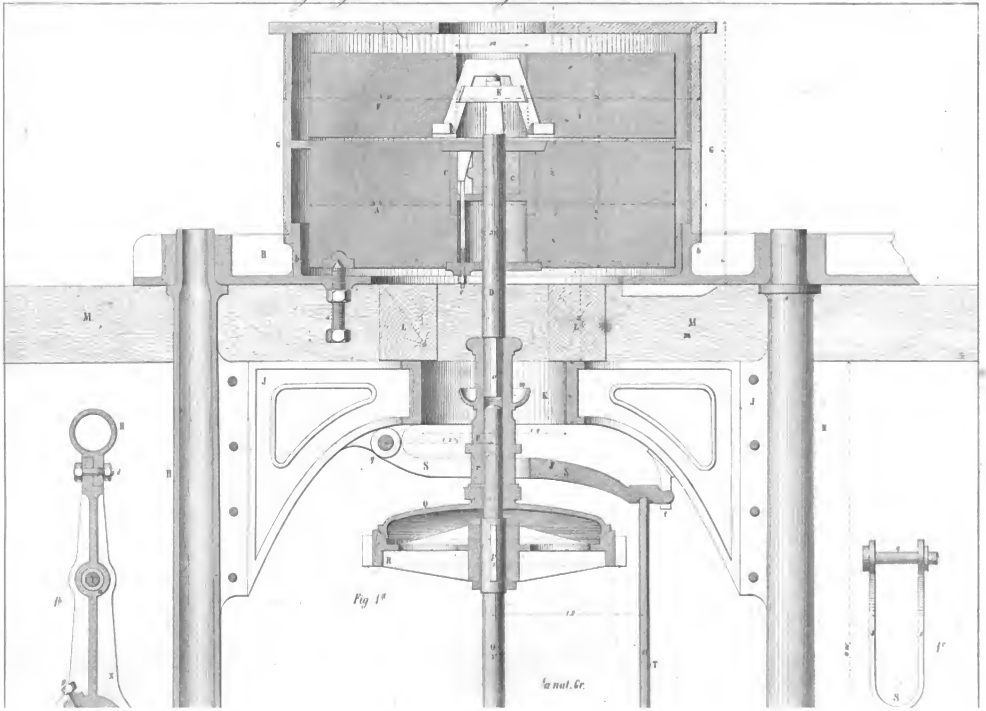

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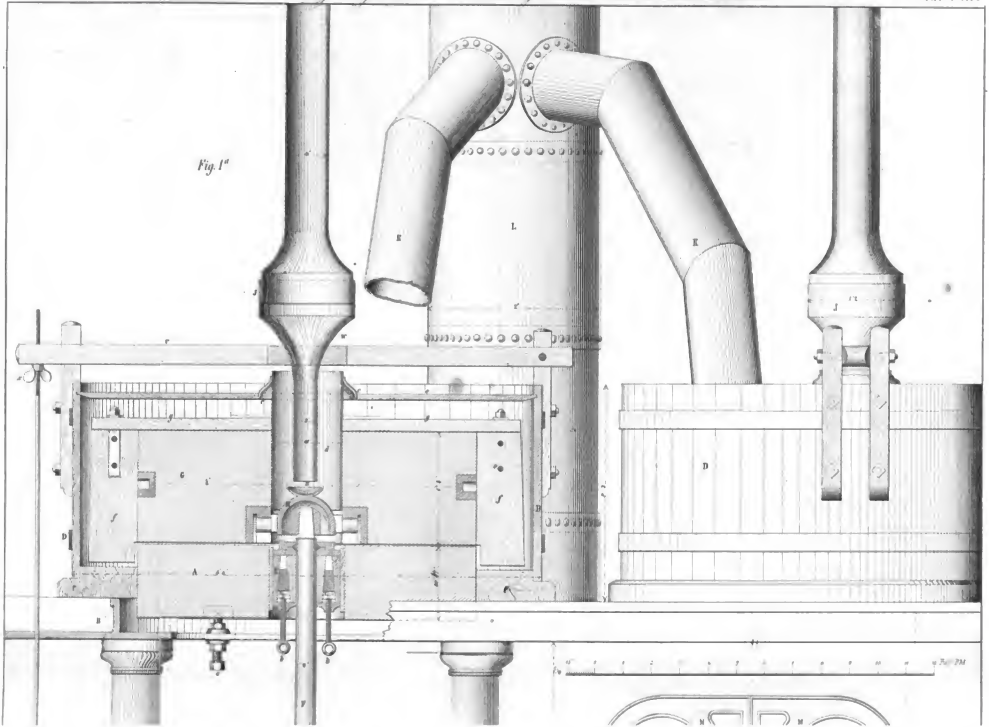

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Fig 2.
1/8 nat. Gr.

1/12 nat. Gr.

Königliche Mühlen zu Berlin.

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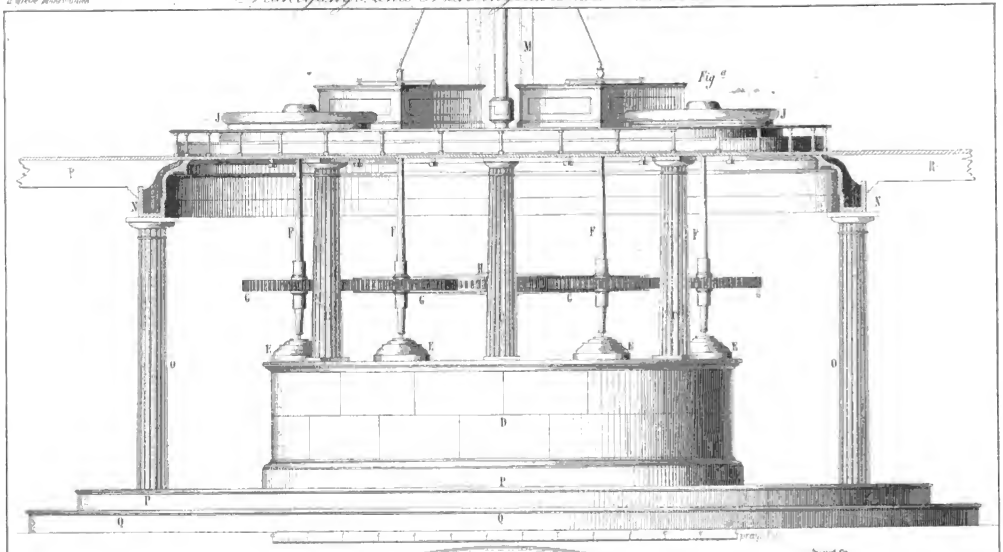

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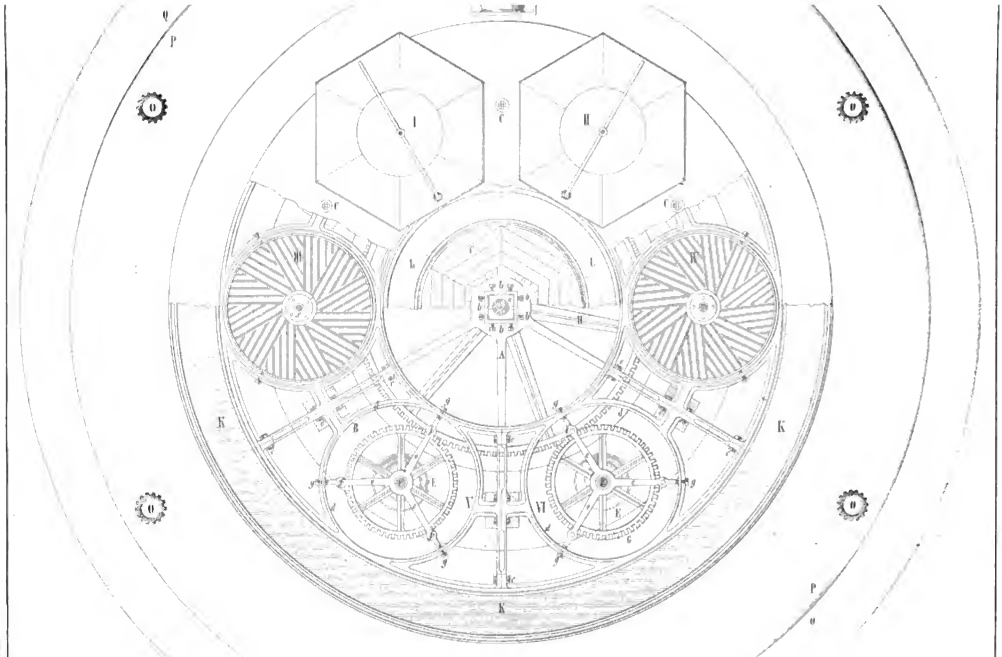

Kreisförmiges Mühlengerüst Skizze nach Hollet

Tafel X.

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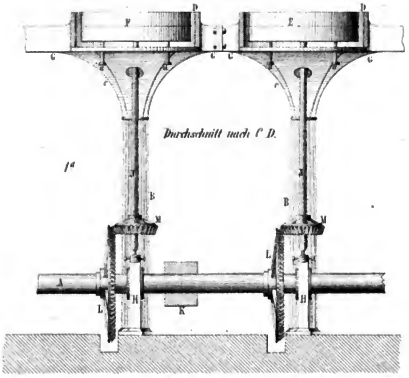
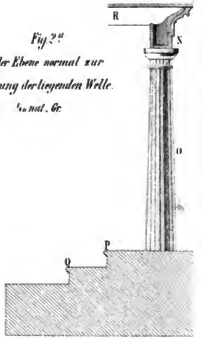
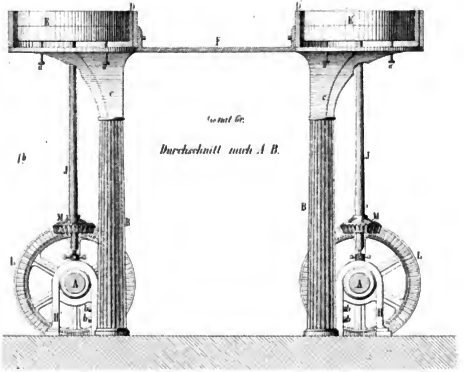


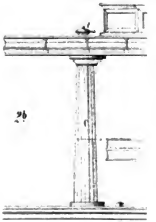
Fig. 2a
Ansicht in der Ebene normal zur Längenrichtung der liegenden Welle.
1/10 nat. Gr.

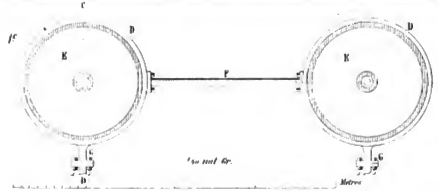




1/10 nat. Gr.

Fig. 2b Ansicht in der





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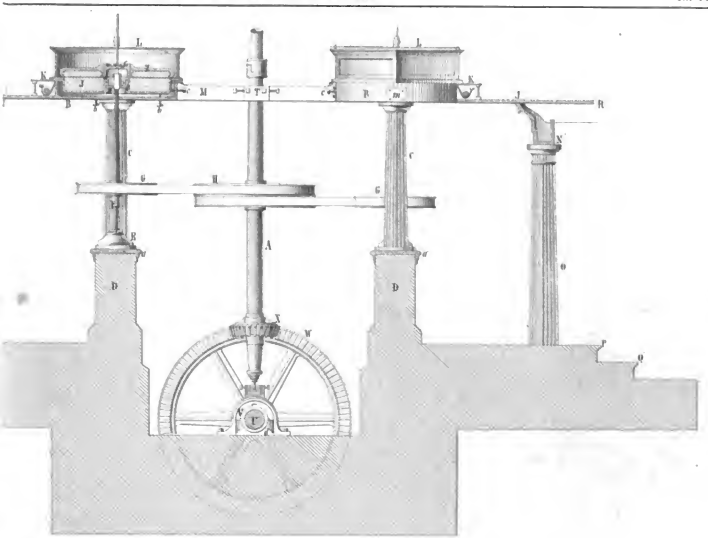
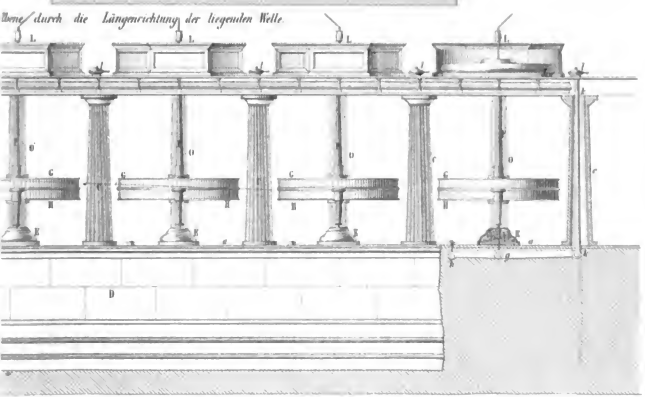


Ebene durch die Längenrichtung der liegenden Welle.



1/50 nat. Gr.

1. Mahlgänge mit Räderbetrieb. Skizze nach Fairbairn. 2. Mahlgänge mit Riemenbetrieb. Skizze v. Rollet u. Lafferon.

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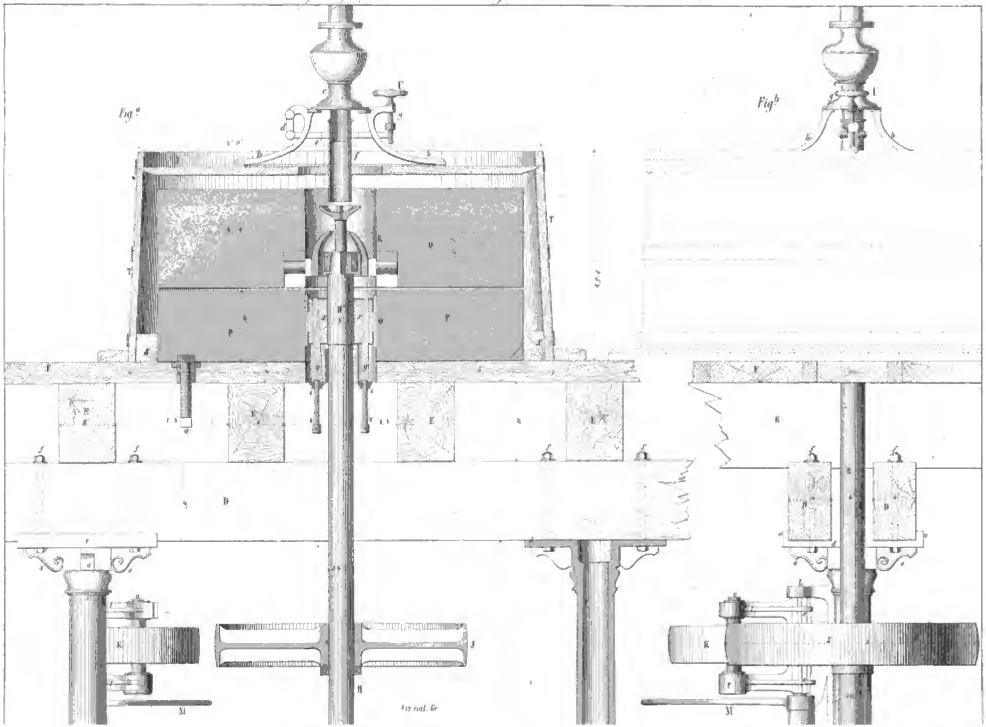

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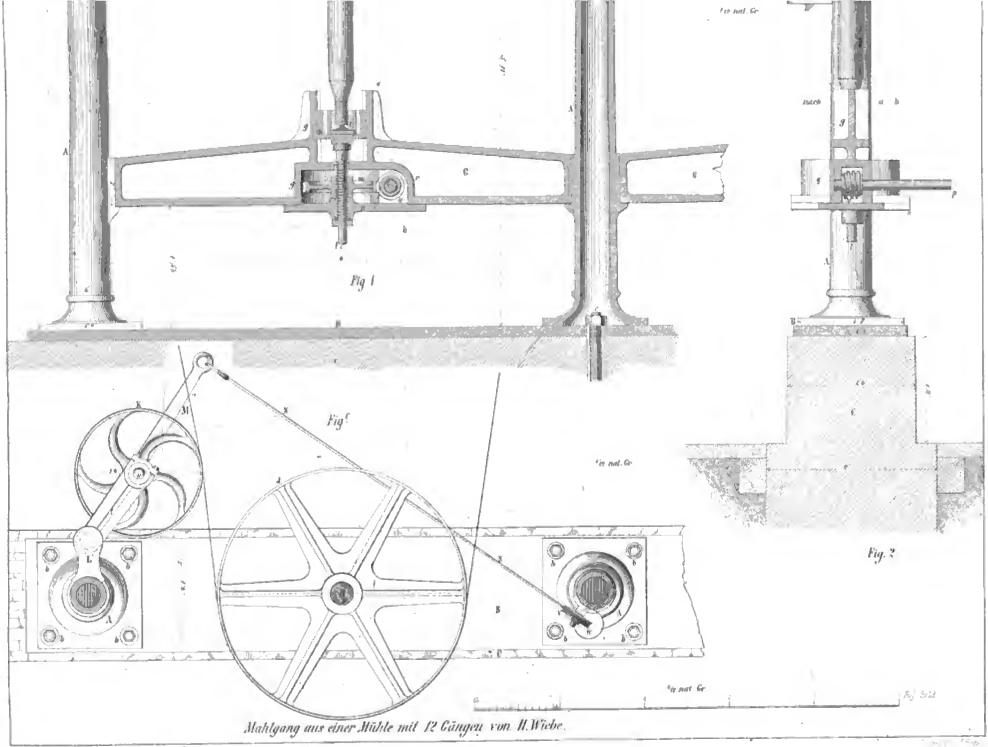

Mahlgang aus einer Mühle mit 12 Gängen von H. Wiebe.

Tafel XII.

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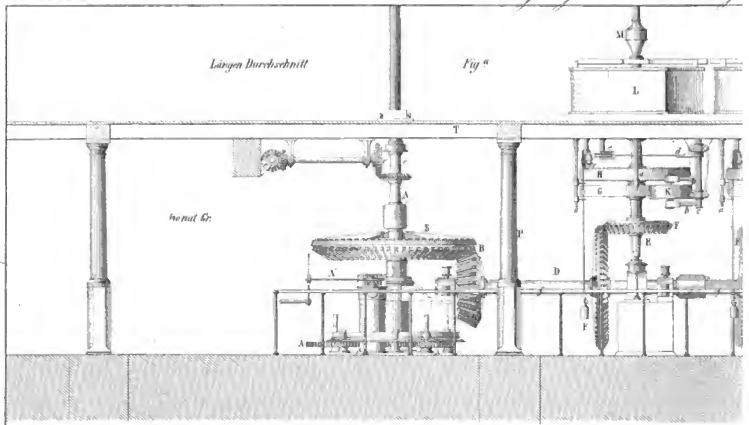
Längen Durchschnitt

Fig.a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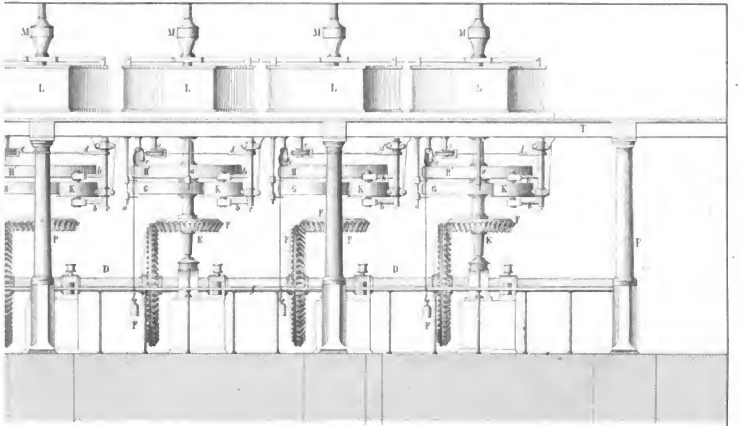
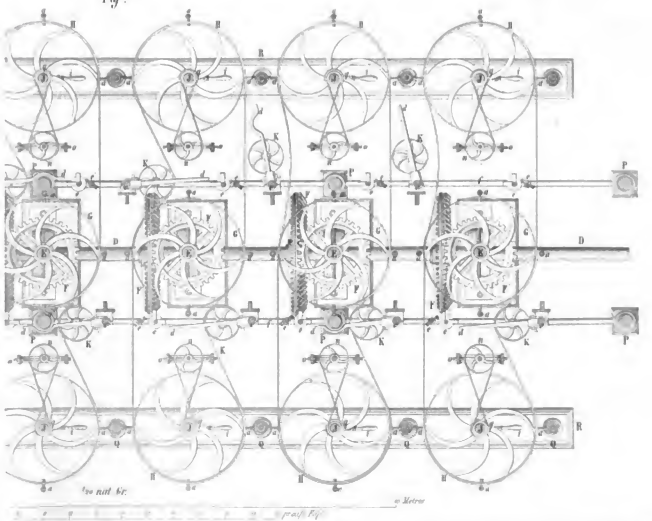


Fig b



Tafel XIII.

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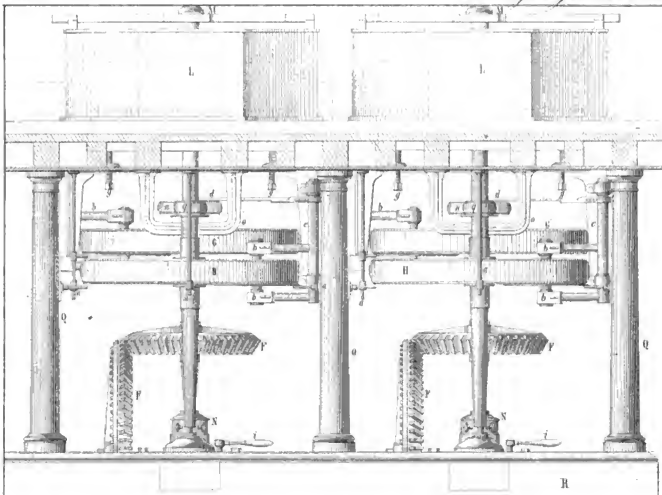
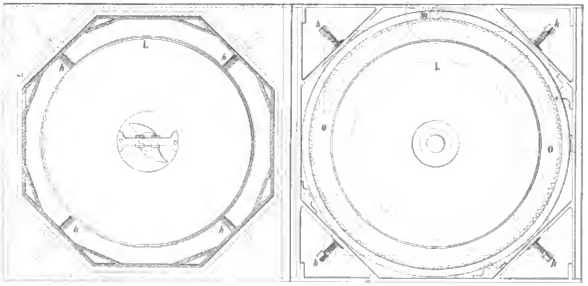


Fig.ᵉ Ansicht nach der Länge.

Fig.ᵉ Obere Ansicht auf die Gänge.



¹/₂₀ nat. Gr.

¹/₂₀ nat. Gr.

Mühle von Durblay

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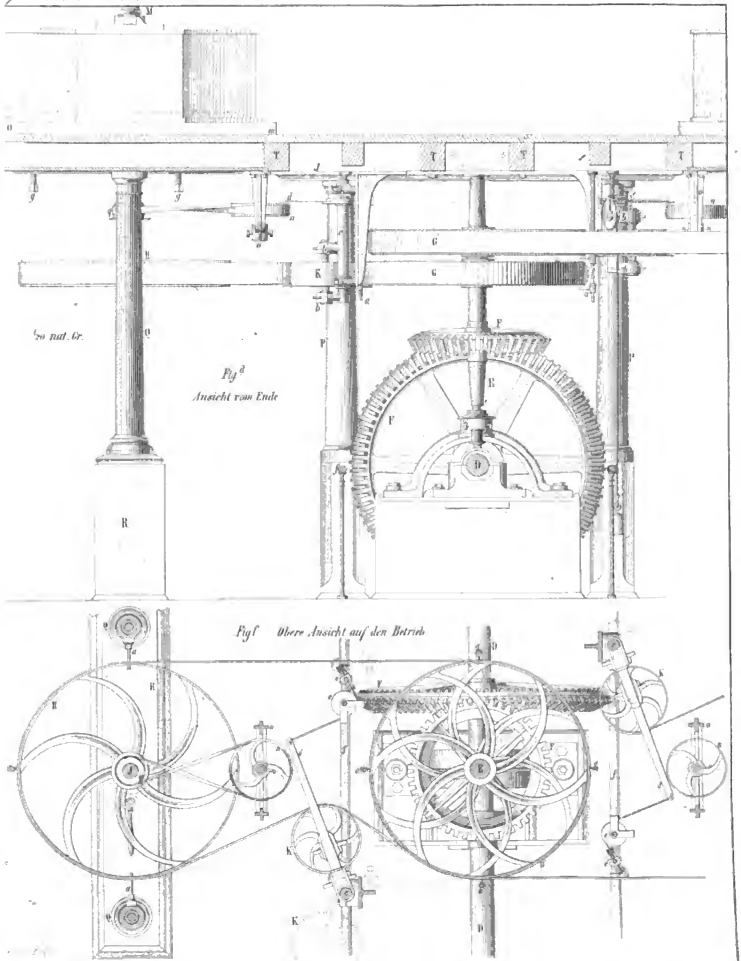

zu Verheil (Zweites Blatt)

Tafel XIV.

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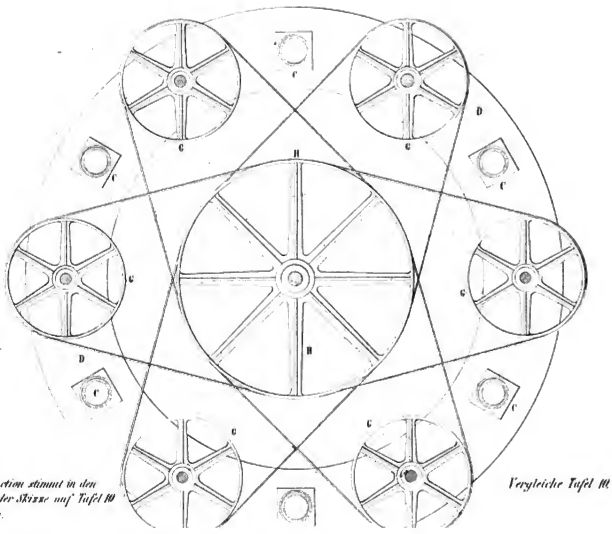
Obere Ansicht des Riemenbetriebes für sechs Mahlgänge


C
D
H
C
C
C

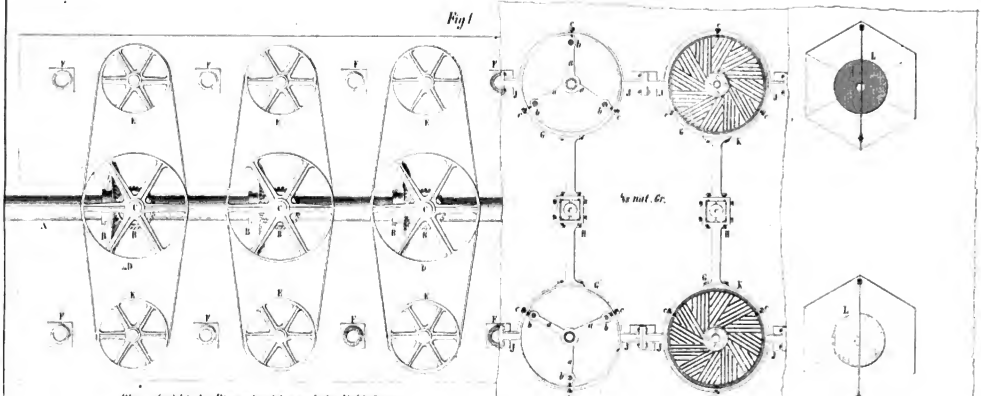
1/24 nat. Gr.

Äußere Treppenstufe (s. Vergl. Taf. III)

3/4 nat. Gr.

1/24 nat. Gr.

Fig I



Obere Ansicht des Riemenbetriebes und der Mahlgänge

1 Rechteckiges 2 Kreisförmiges Mühlengerüst. Skizze nach Rollet.

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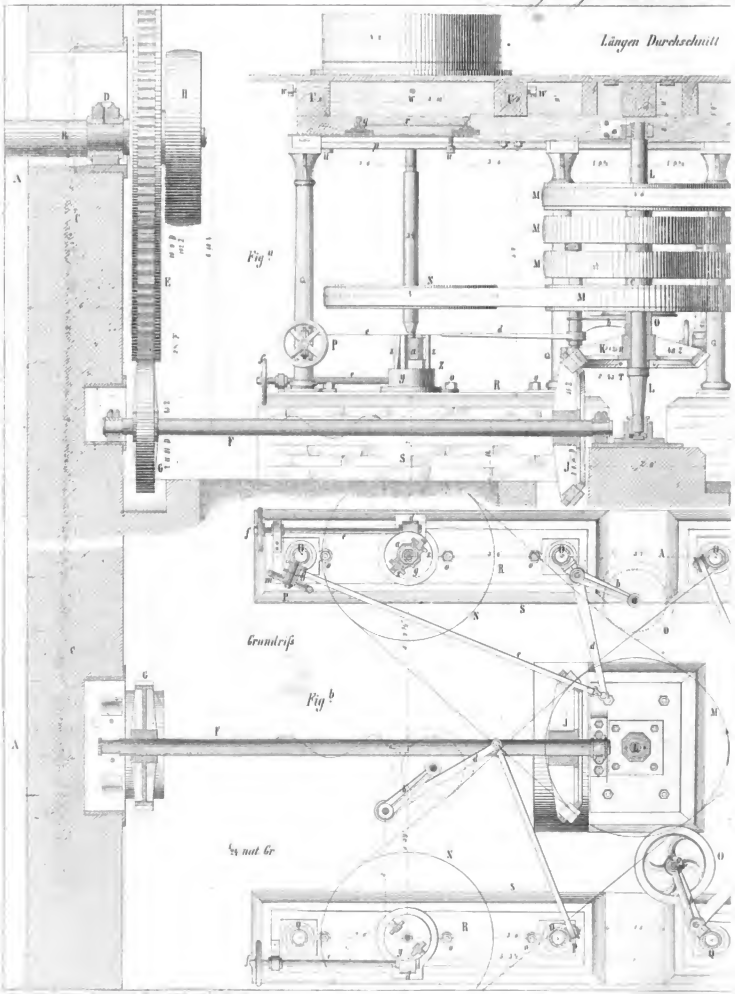

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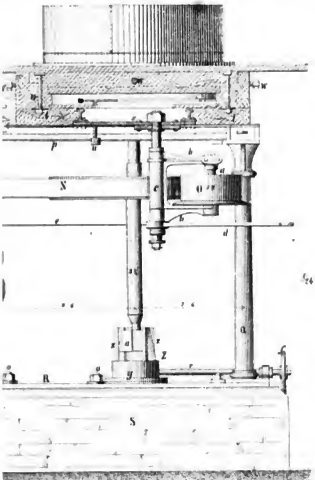
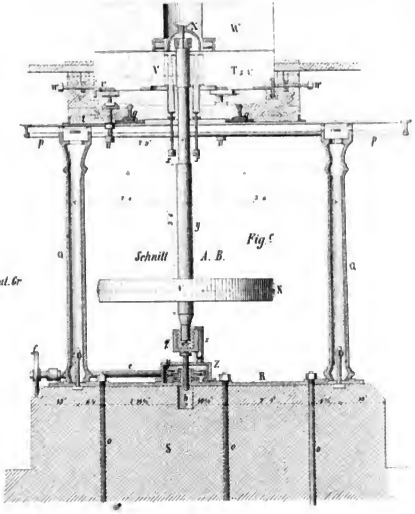
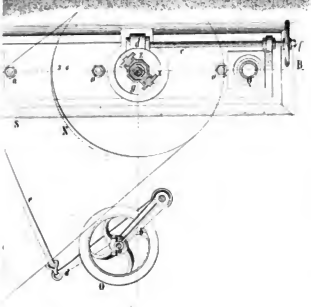


1/16 nat. Gr.



Schnitt A. B. Fig c



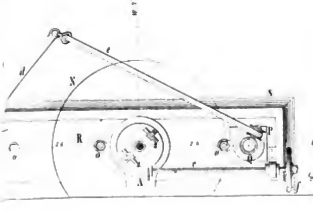
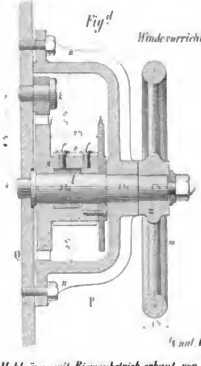


Fig d Windevorrichtung



1/8 nat. Gr.

Fig e

Vier Mahlgänge mit Riemenbetrieb erbaut von H. Wiebe

1/8 nat. Gr.

1/4 nat. Gr.

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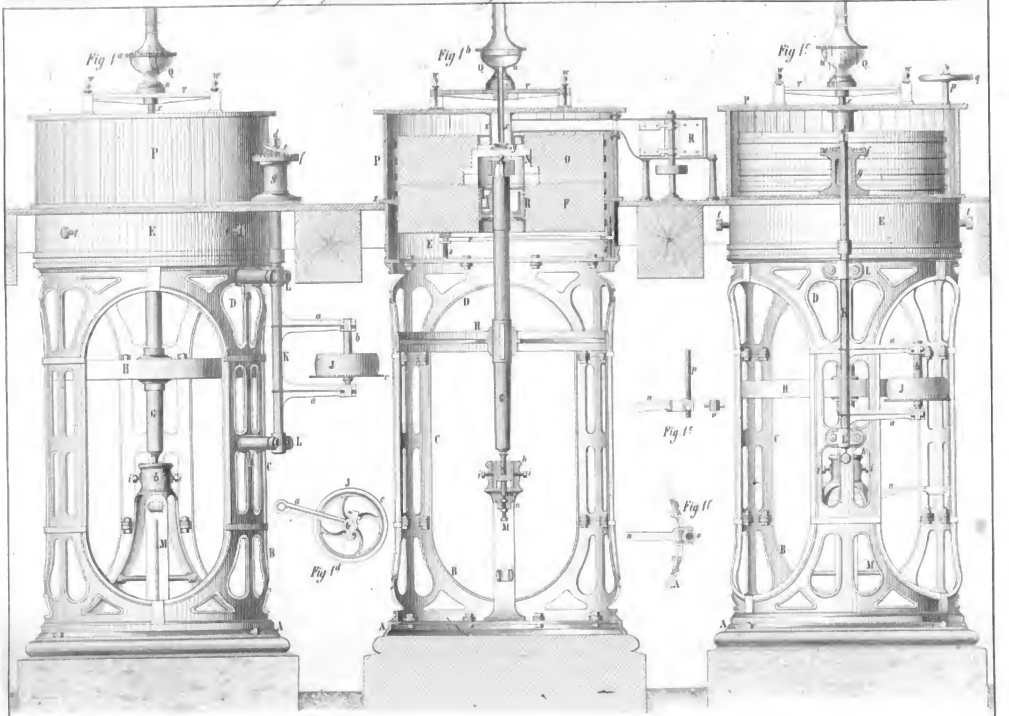

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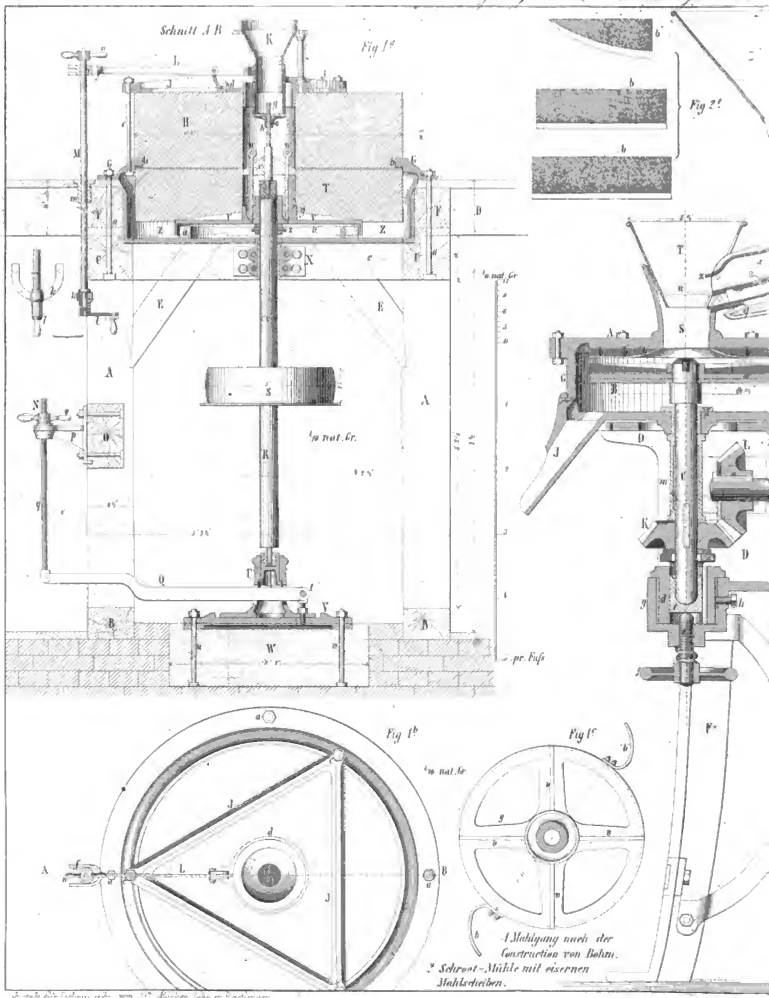
Mahlgänge und Mühlengerüste



Gesch. für Lithog. u. Dr. von J. D. Mücken Sohn in Rudingen

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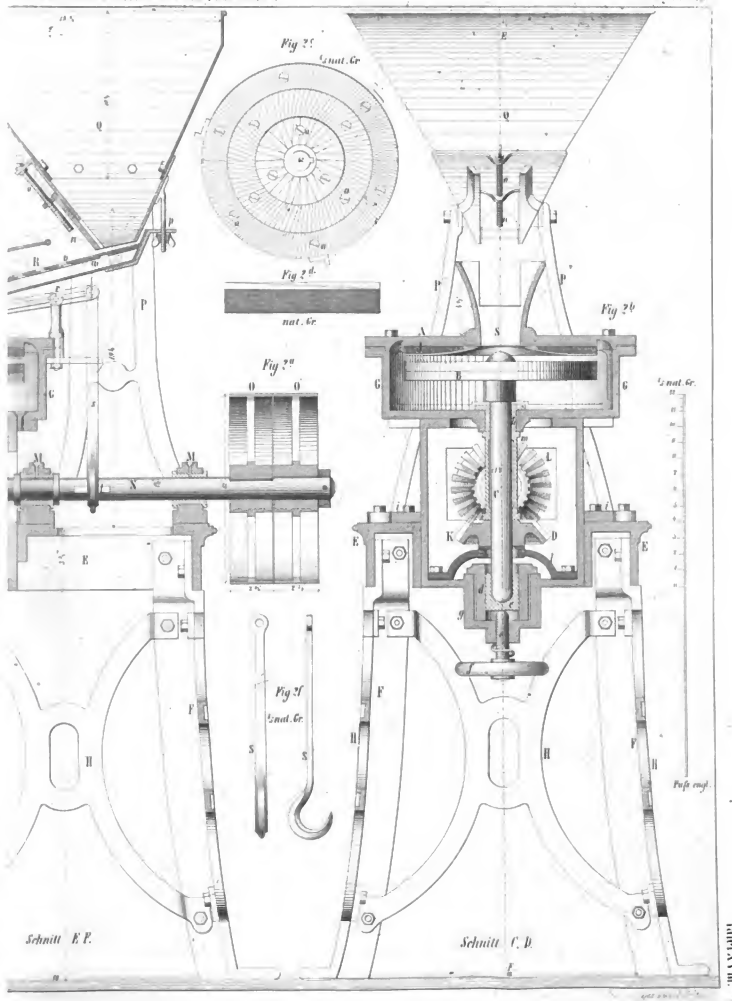

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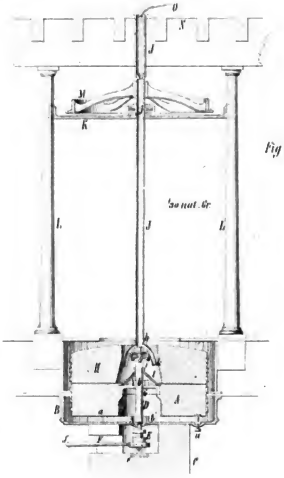
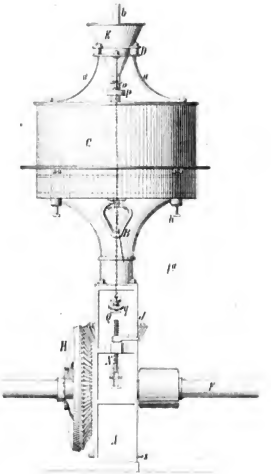
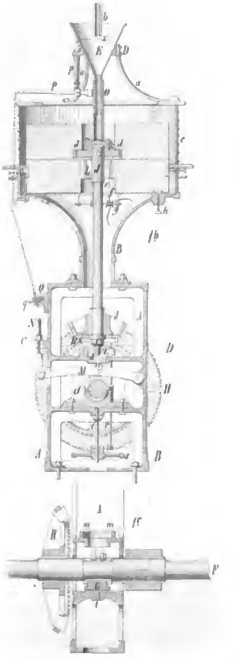


Fig 7





nach A. B.

nach C. D.

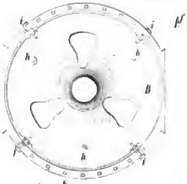
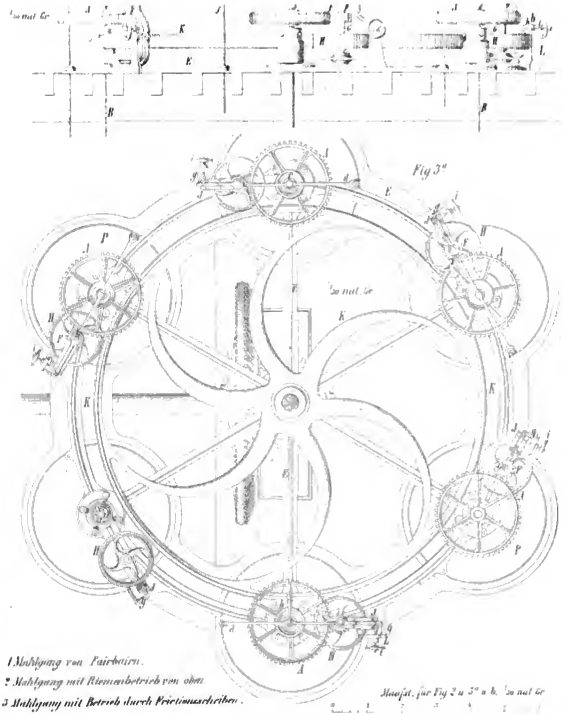


Fig 3b



1 Mahlgang von Fairbairn.
2 Mahlgang mit Riemenbetrieb von oben.
3 Mahlgang mit Betrieb durch Friktionsscheiben.

Maasst. für Fig 3 u 3a b, 1/20 nat Gr

Maasst für Fig 3 c u d

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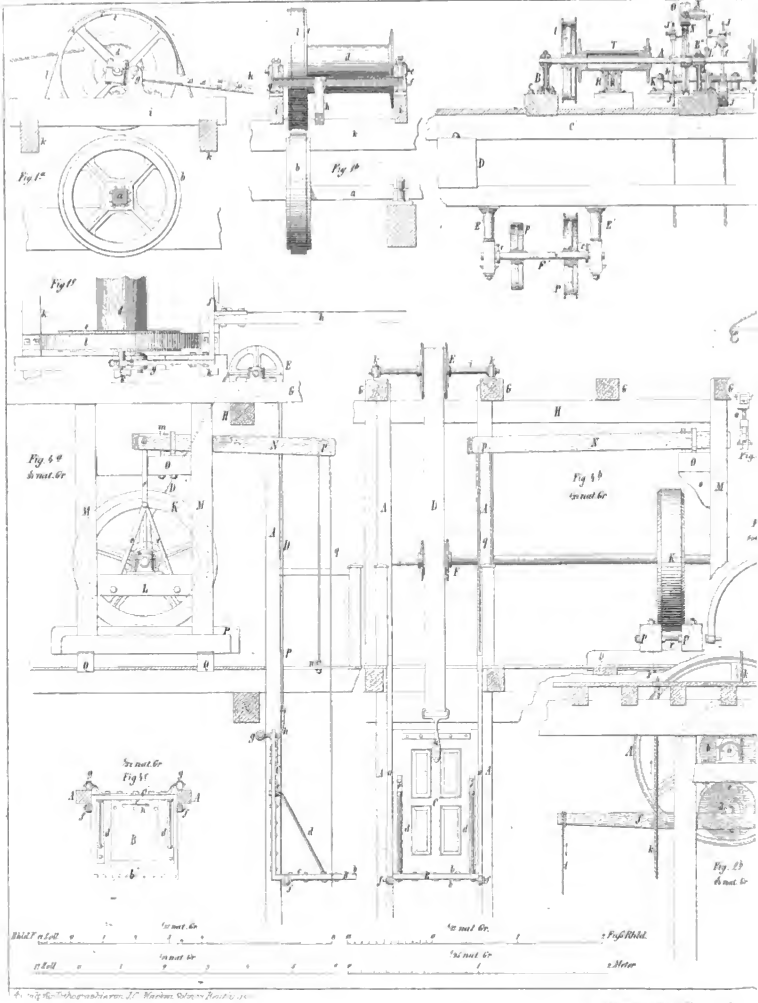

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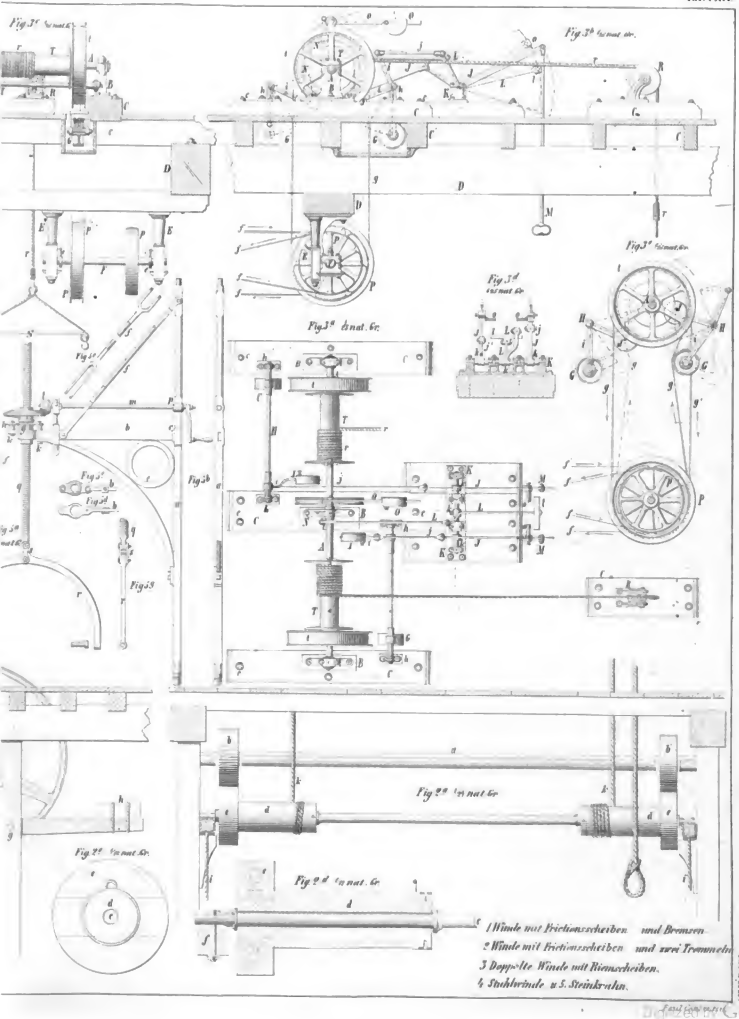

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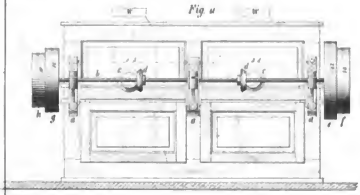
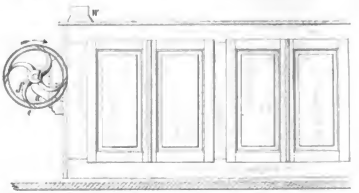
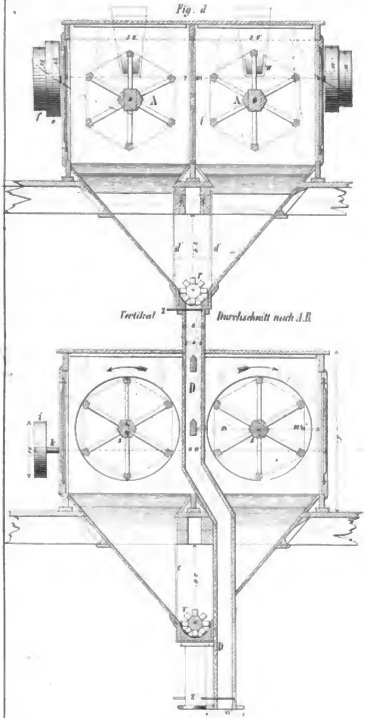
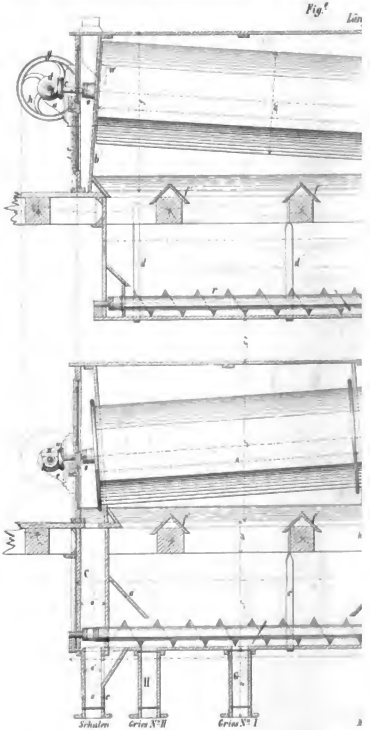
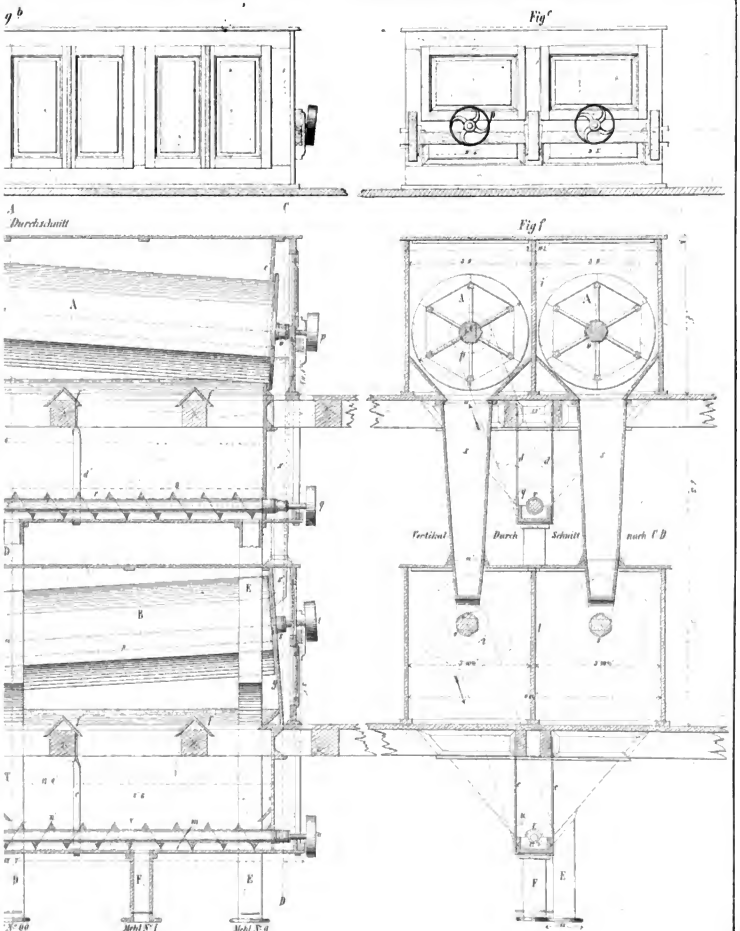
Cylinder Beutel-Maschine











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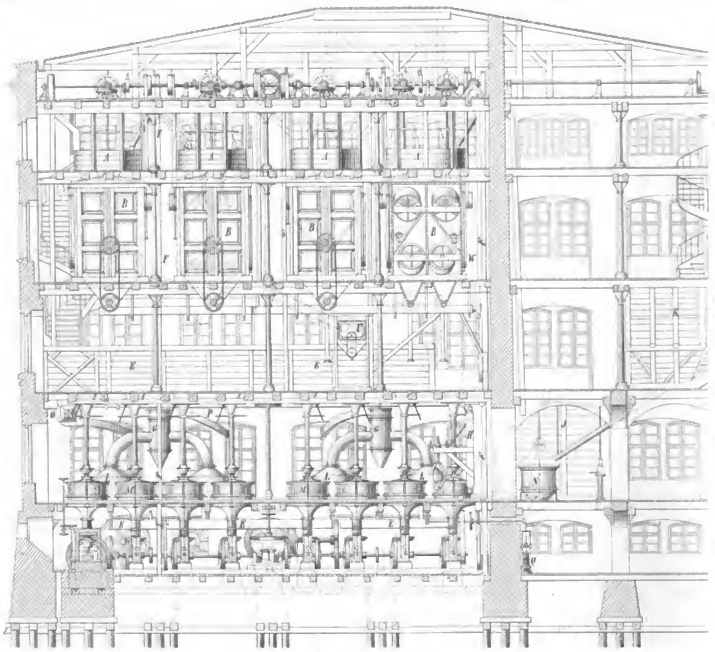
H. Wiebe

Wasser-Mahlmühle mit zwölf Ge



Schnitt A.B.C.D.

A. Hopper bog
B. Beutel Maschinen.
C. Getreide Schüttkasten zur Spei ung der Mahlgang
D. Klei Kasten
E. Schrot Schnecke
F. Schrot Elevator.
G. Exhauster.
H. Steinkrahn
J. Mehl Kasten
K. Getreide Kasten
L. Schrot Recipient
M. Mahlgang
" Getreide Wage.
O. Ventilator.
P. Dunst Rohr.
Q. Wasser Pumpe
R. Getreide Kasten
S. Getreide Elevator
T. Abfallröhren f. Getreide
U. Beutel Kasten für Klei.

Die Rothermühle in Bromberg.

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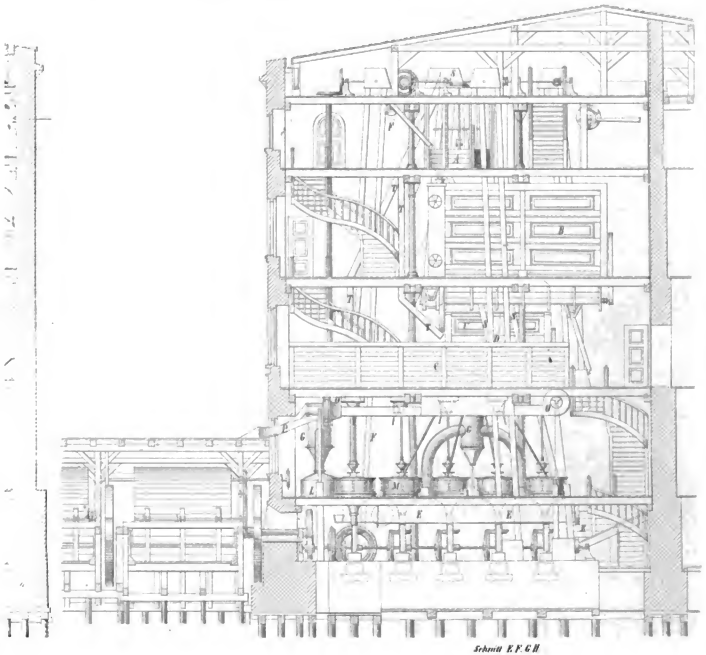
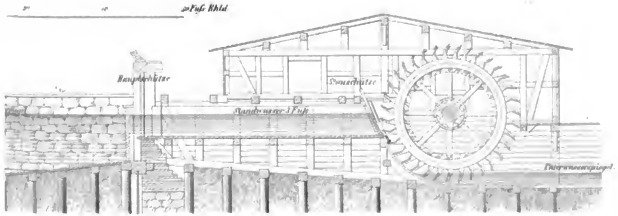


Schnitt E F G H



Längen Durchschnitt durch die Fördstube und das Gerüste.

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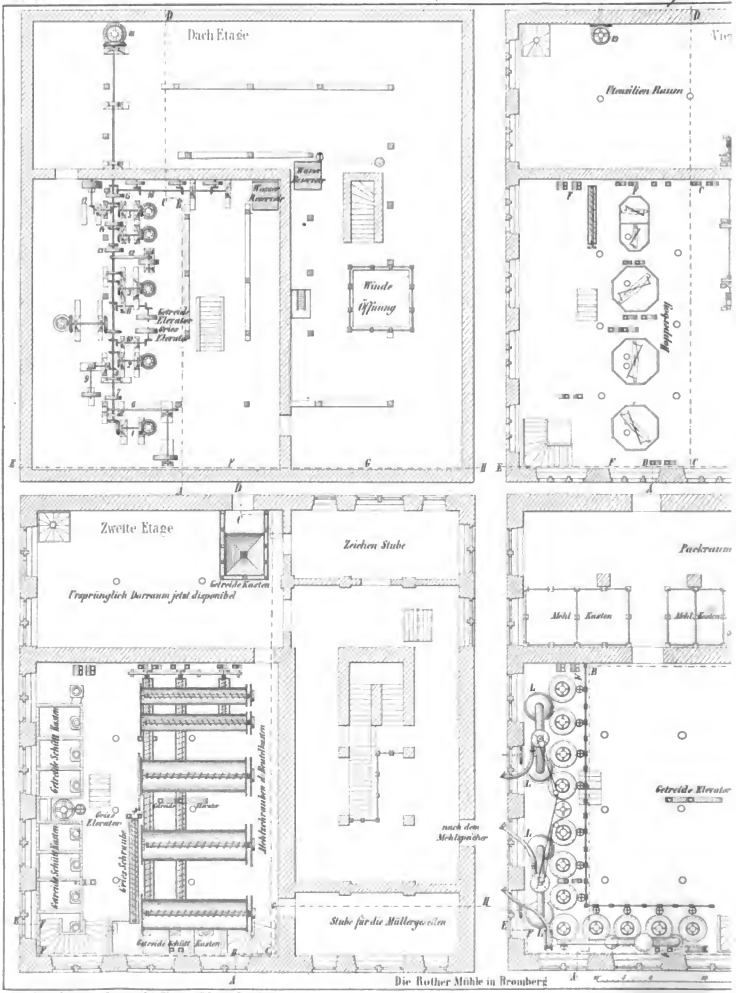
Wassermahlmühle mit zwölf



Die Rother Mühle in Bromberg

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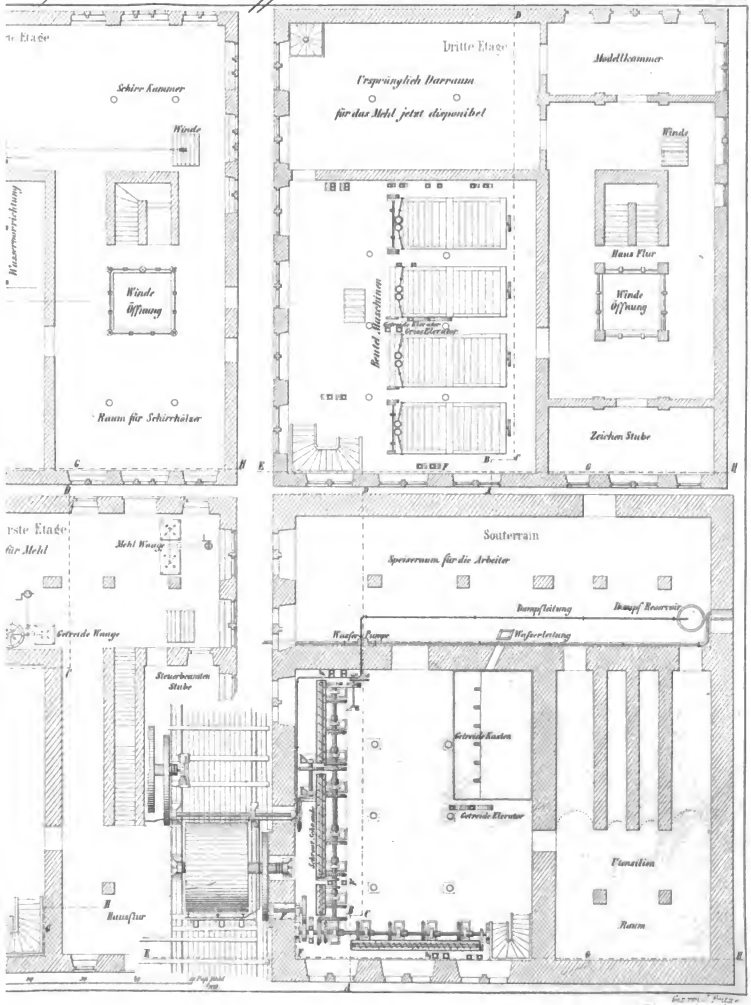

Tafel XXIII.

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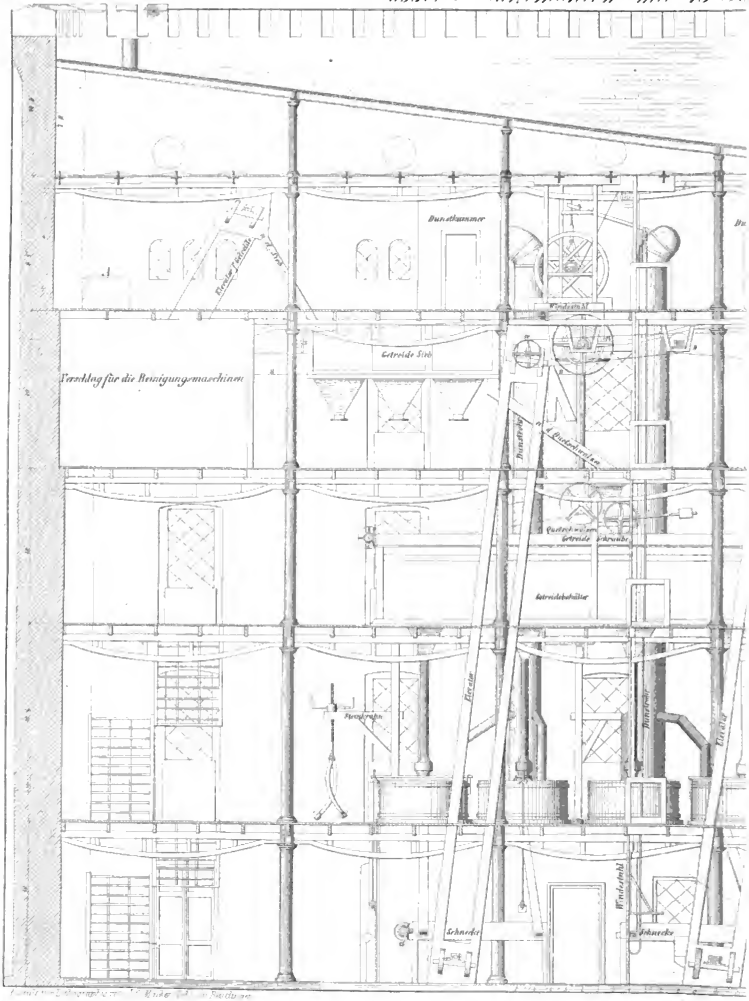

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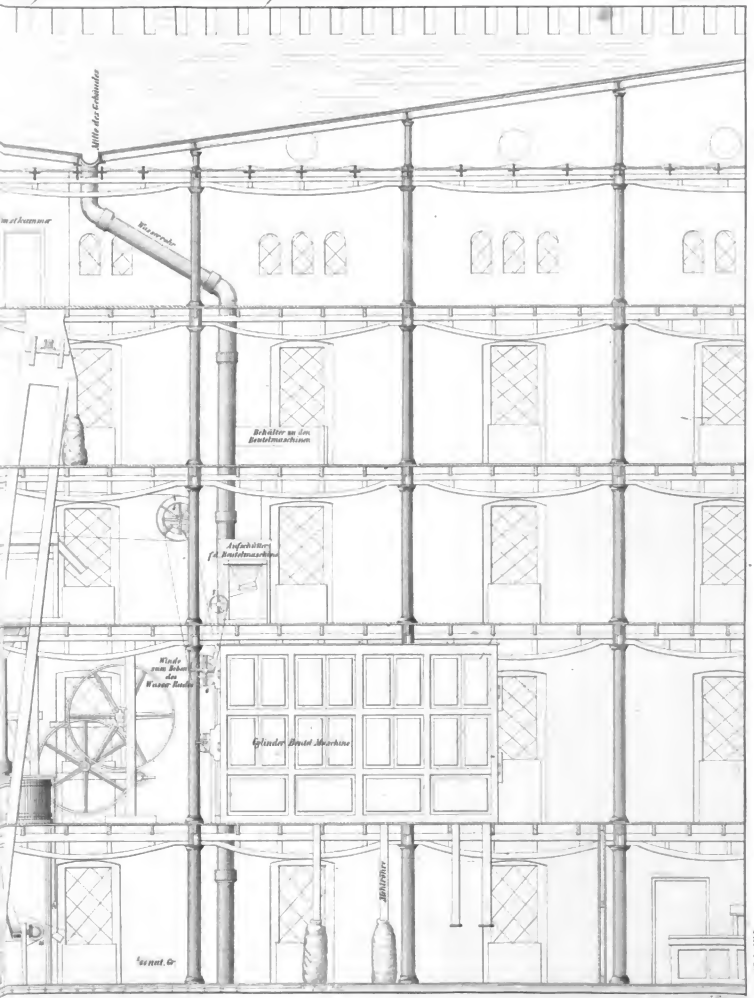

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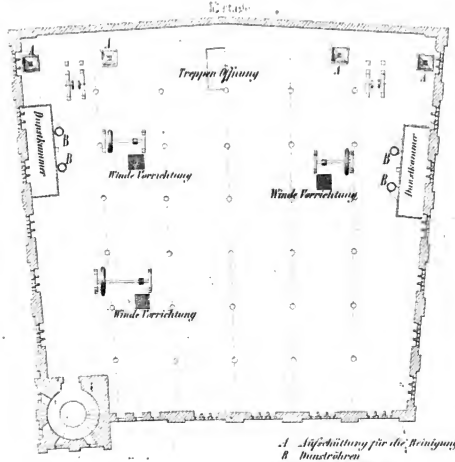
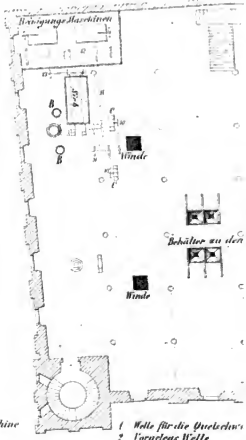
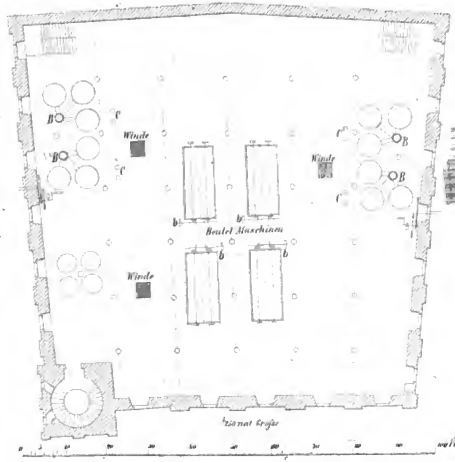


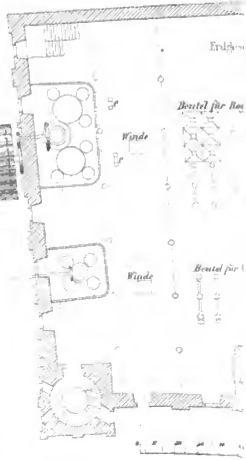


A Aufschüttung für die Reinigungsmaschine
B Dunströhren
C Schrot Elevatoren
D Aufschüttung f. d. Griesgänge.

1 Welle für die Querlechw
2 Vorgelege Welle
3 Riemscheibe f. die Ge
4 Welle
5 u. 6 Riemscheibe

I Etage





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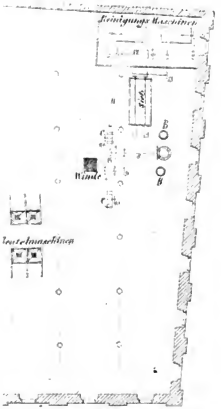
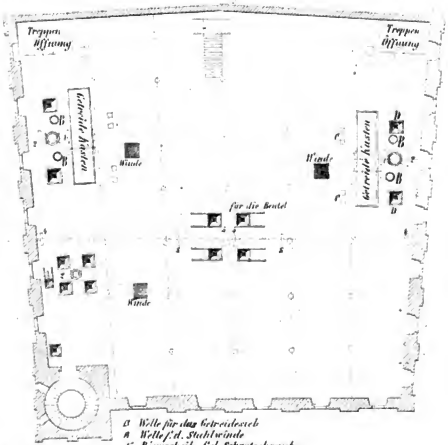




II Etage

Reinigungs Maschinen

Winde

Beutelmaschinen

Treppen Öffnung

Getreide Kasten

Winde

für die Beutel

Winde

Treppen Öffnung

Getreide Kasten

Winde

7 Riemscheibe für die Aufschütter
8 Obere Vorgelegs Welle
9 Riemscheibe
10 Riemscheibe } für die Schrot Elevatoren
11 Riemen
12 Welle } für die Reinigungsmaschinen

13 Welle für das Getreidesieb
14 Welle f. d. Stahlwinde
15 Riemscheibe f. d. Schrotschraube.

Situations Plan der Kunst Mühle

Winde

für den Steuerbeamten

1000 Nat Größe

Fuß Rhld

Fischer Straße

Spree

Fischerbrücke

Spree

Mühlendamm

Kleiner Speicher

Kleine Mühle

Große Mühle

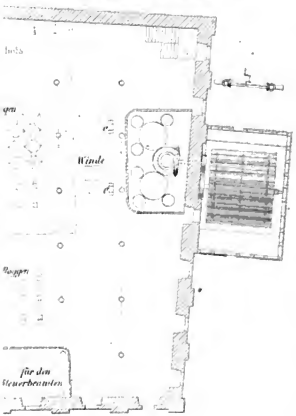
Neue Fahrstraße

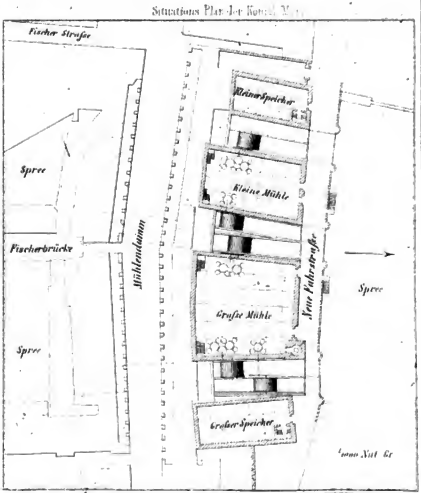
Spree

Großer Speicher

1000 Nat Gr

Tafel XXV





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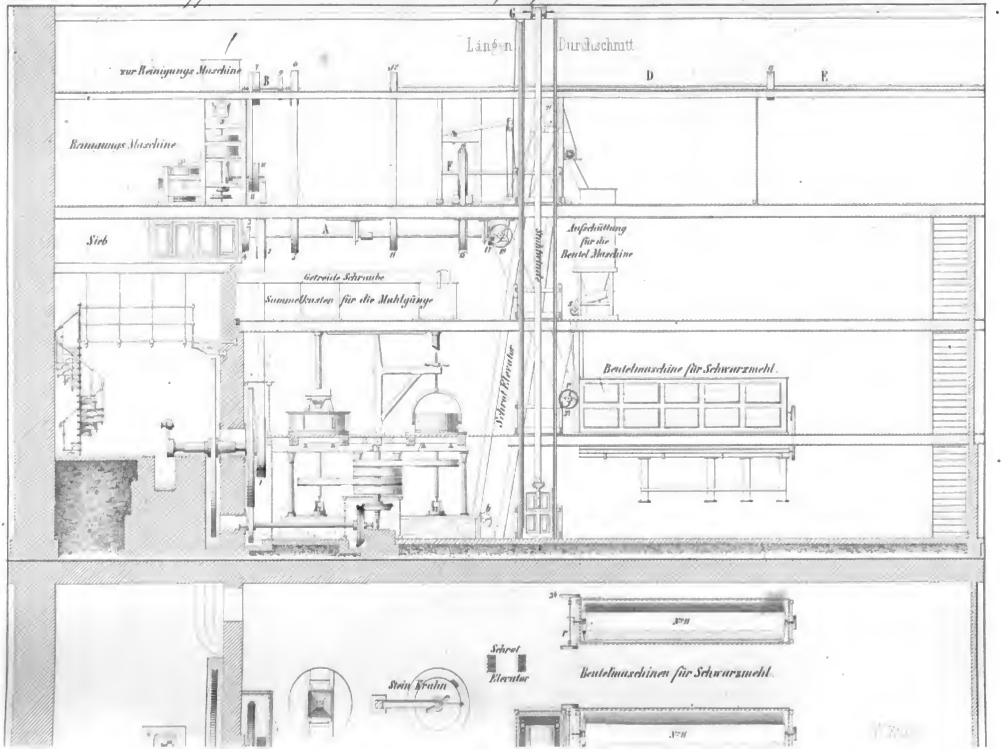
Dampfmahlmühle mit vier Mahlgängen von H. Wiebe (Erstes Blatt) Tafel XXVI.



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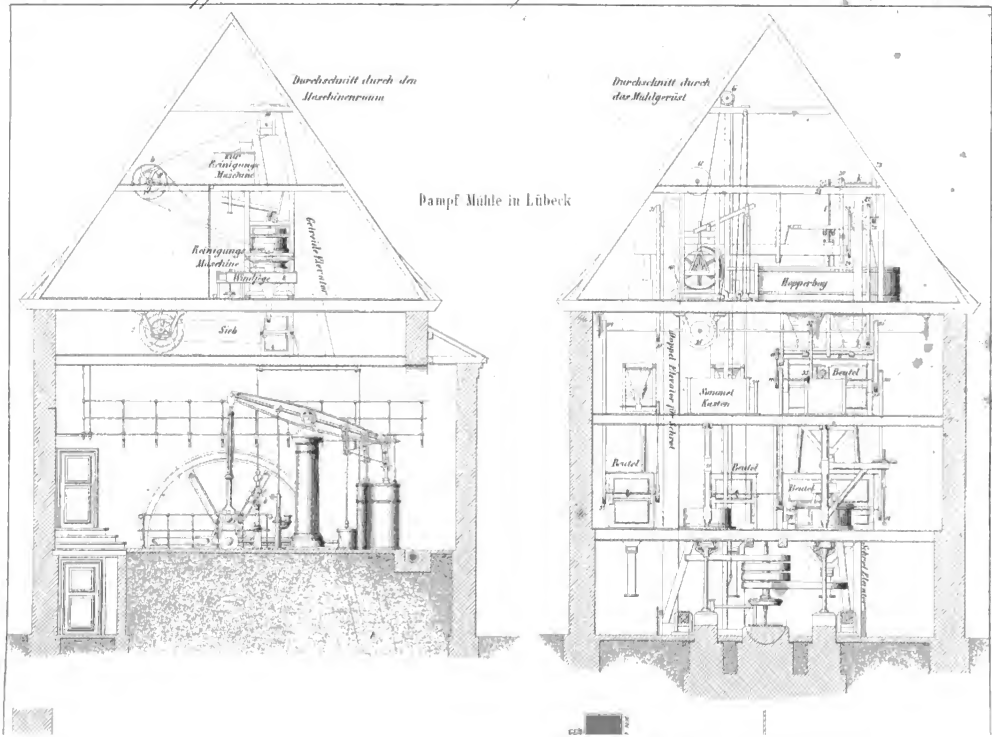

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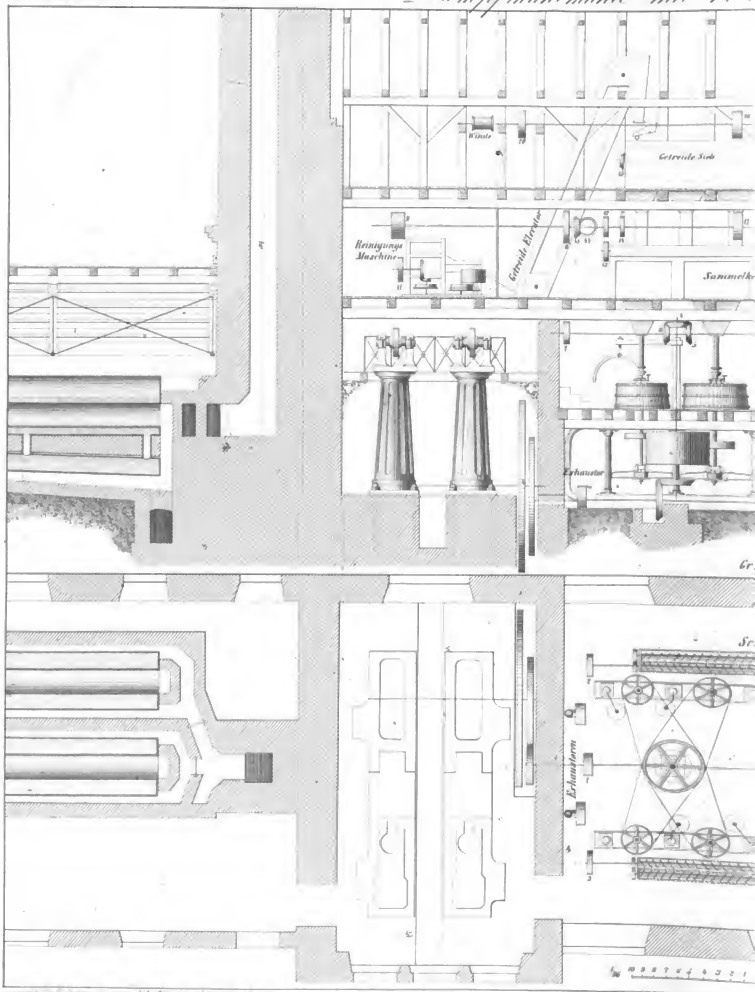

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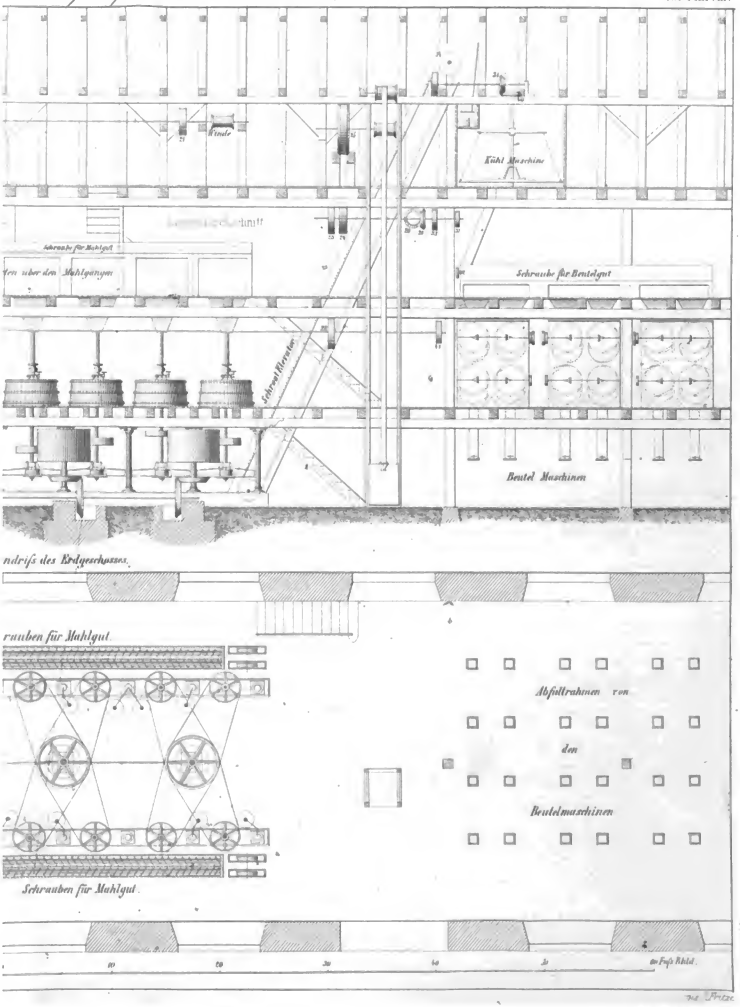
Mahlgängen von H. Wiebe.

Tafel XXVIII.



Tafel XXVIII.

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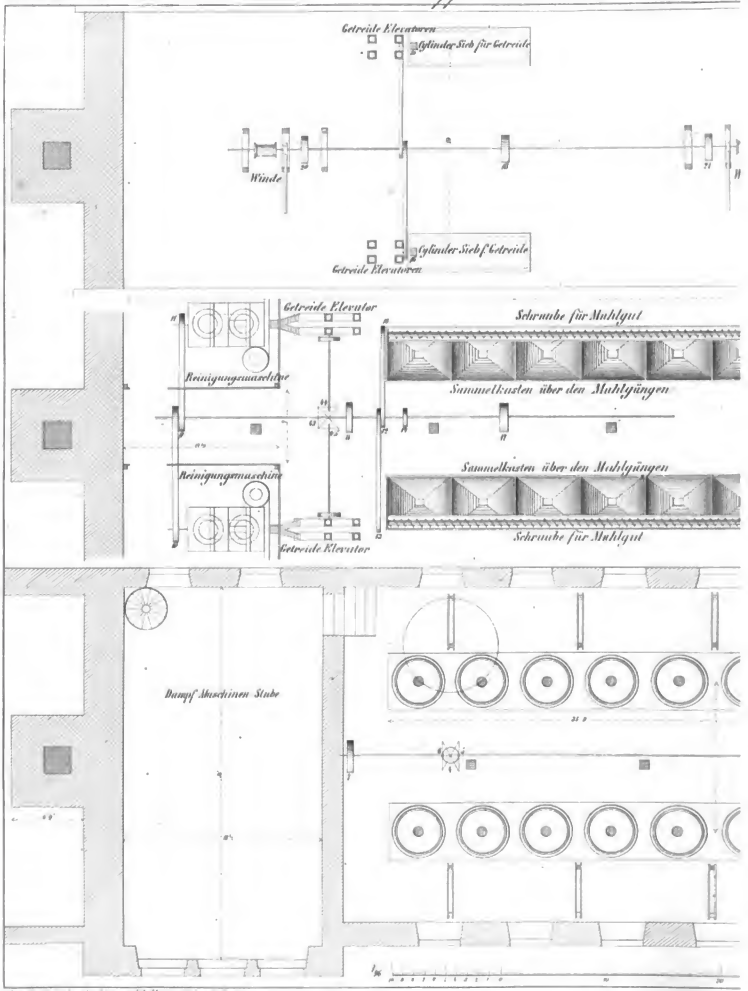
Dampf-Mahlmühle mit 12 Gan



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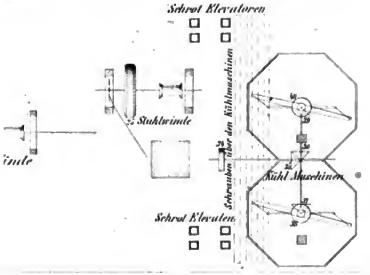

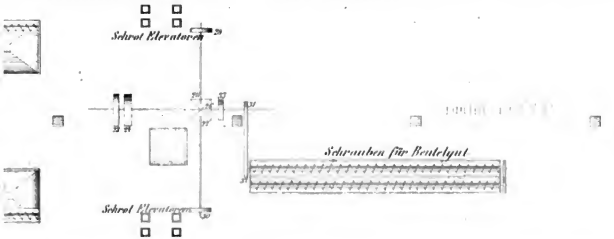

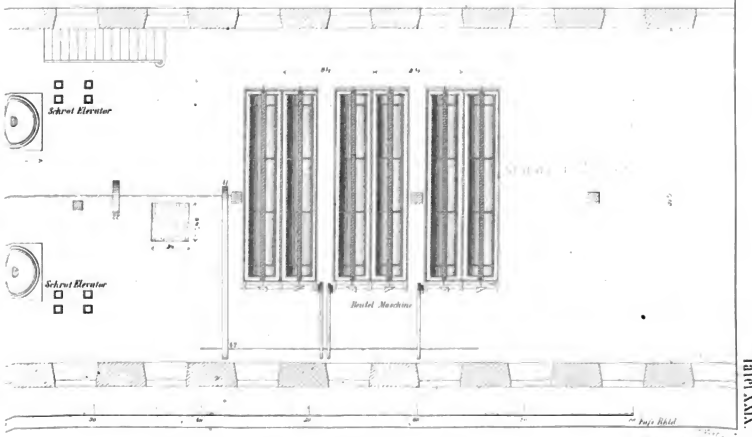

Tafel XXIX.

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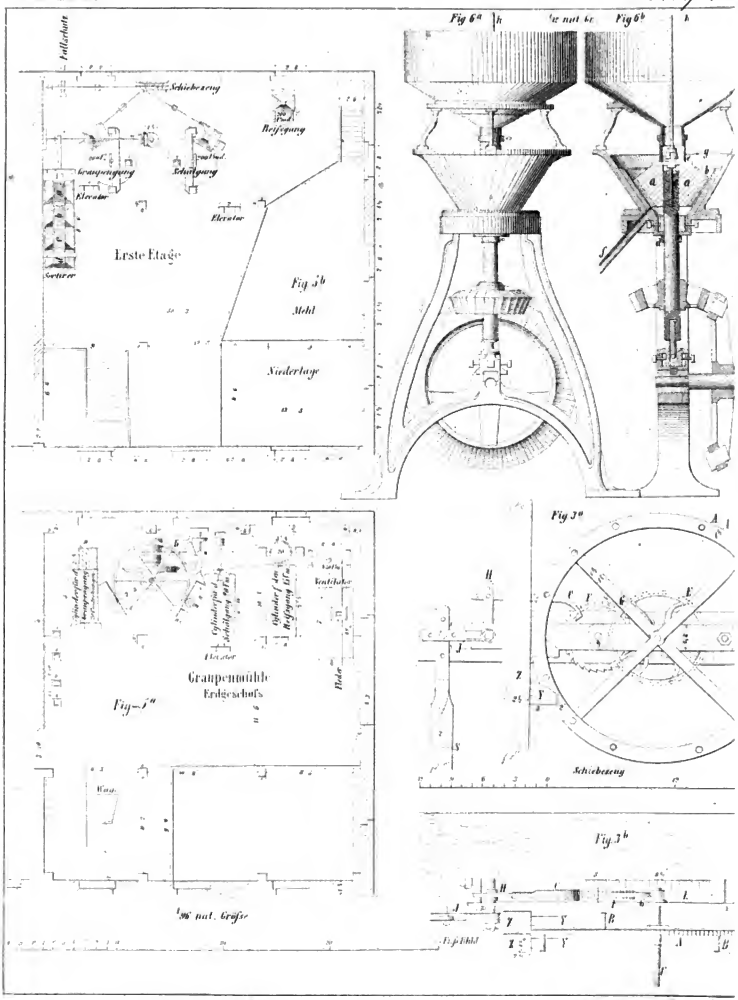

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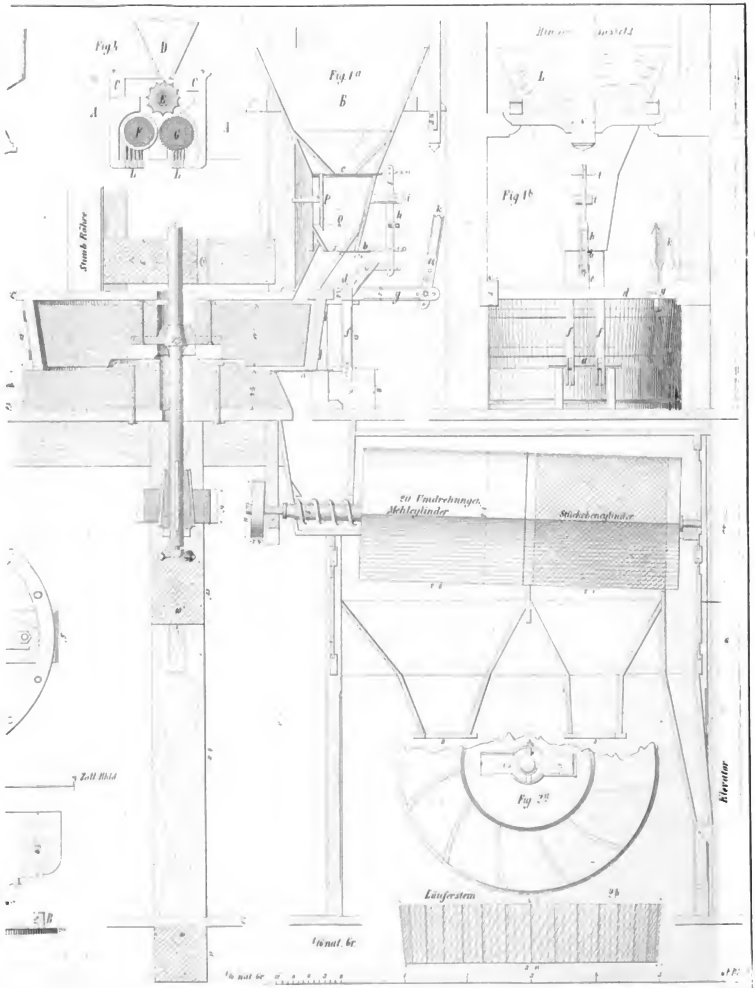

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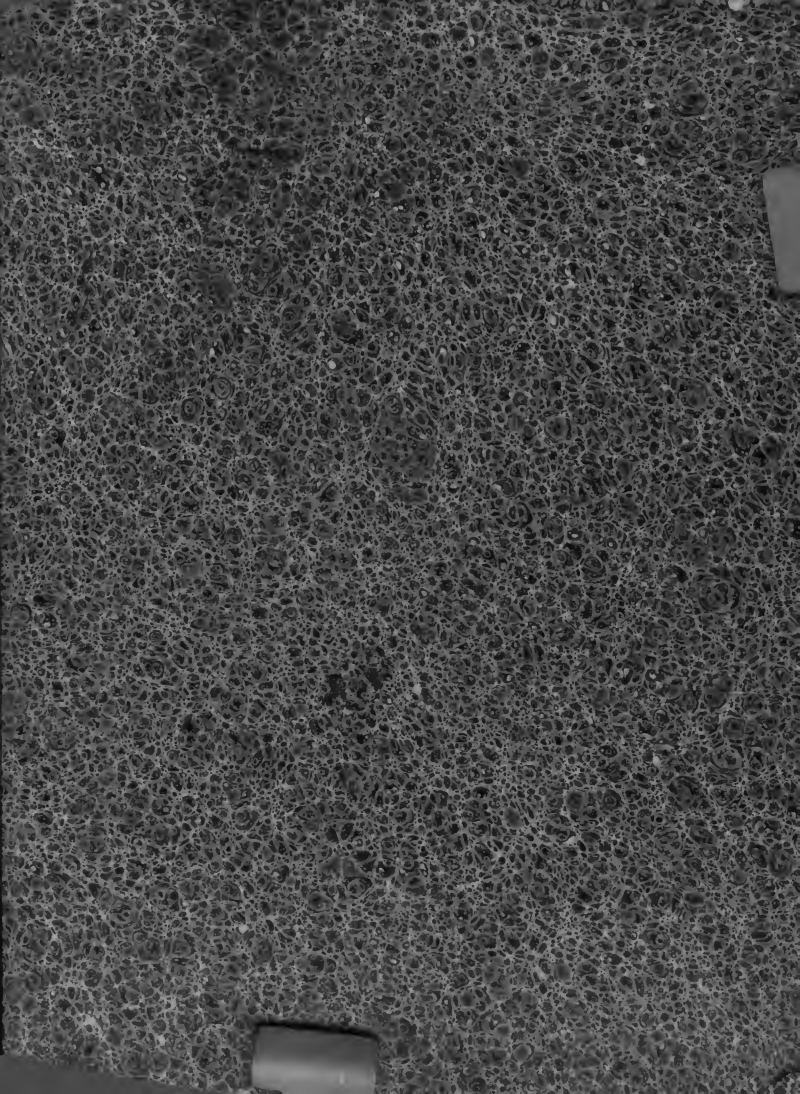
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